

Record Display Form

encompasses 50% or more of the locus of pain, and wherein the administration is not at the locus of pain, thereby relieving the pain for at least one month.

24. The method of claim 23 wherein the patient has at least eleven loci of pain.

25. The method of claim 23 wherein the locus of pain and the peripheral location are located within a dermatome.

26. The method of claim 23 wherein the botulinum toxin is selected from the group consisting of botulinum neurotoxin types A, B, C, D, E, F, and G.

27. The method of claim 23 wherein the botulinum toxin is a botulinum toxin type A.

28. The method of claim 23 wherein the location of administration and the locus of pain have neuronal processes that are projected from the same spinal sensory nerve root.

29. The method of claim 23 wherein the botulinum toxin is administered with a needle.

30. The method of claim 23 wherein the botulinum toxin is administered by needleless injection.

31. A method for treating fibromyalgia, the method comprising the step of administering subcutaneously or intramuscularly a therapeutically effective amount of a botulinum toxin type A to a dermatome of a patient afflicted with fibromyalgia, wherein the dermatome encompasses 50% or more of a locus of pain which is at a fibromyalgia tender point, and wherein the local administration is not at the locus of pain, thereby relieving a fibromyalgia pain for at least one month.

32. A method for treating fibromyalgia pain, the method comprising the step of administering subcutaneously or intramuscularly a therapeutically effective amount of a botulinum toxin type A to a dermatome of a patient, wherein the patient has a locus of pain which is at a fibromyalgia tender point, wherein the dermatome encompasses 50% or more of the locus of pain, and wherein the administration is not at the locus of pain, thereby relieving the pain for at least one month.

First Hit    Fwd Refs

L9: Entry 70 of 122

File: USPT

Sep 23, 2003

US-PAT-NO: 6623742  
DOCUMENT-IDENTIFIER: US 6623742 B2

TITLE: Methods for treating fibromyalgia

DATE-ISSUED: September 23, 2003

## INVENTOR INFORMATION:

| NAME            | CITY                | STATE | ZIP CODE | COUNTRY |
|-----------------|---------------------|-------|----------|---------|
| Voet, Martin A. | San Juan Capistrano | CA    |          |         |

US-CL-CURRENT: 424/236.1; 424/247.1, 435/71.3, 514/12, 514/2, 530/344, 530/350

## CLAIMS:

What is claimed is:

1. A method for treating fibromyalgia, the method comprising the step of administering subcutaneously or intramuscularly a therapeutically effective amount of a botulinum toxin to a peripheral location of a body of a patient afflicted with fibromyalgia, wherein the peripheral location is not a locus of pain, and wherein the locus of pain and the site of administration are located within a same dermatome, thereby relieving a fibromyalgia pain for at least one month.
2. The method of claim 1 wherein the peripheral location is in a head of the patient, and wherein the locus of pain is not in the head of the patient.
3. The method of claim 1 wherein the peripheral location is in a head of the patient, and wherein the locus of pain is at a fibromyalgia tender point.
4. The method of claim 1 wherein the peripheral location is in a cranial area or a facial area of the patient, and wherein the locus of pain is at a fibromyalgia tender point.
5. The method of claim 1 wherein the botulinum toxin is selected from the group consisting of botulinum toxin types A, B, C, D, E, F, and G.
6. The method of claim 1 wherein the botulinum toxin is a botulinum toxin type A.
7. The method of claim 1 wherein the location of peripheral administration and the locus of pain have neuronal processes that are projected from the same spinal sensory nerve root.
8. The method of claim 1 wherein the botulinum toxin is administered with a needle.
9. The method of claim 1 wherein the botulinum toxin is administered by

needleless injection.

10. A method for treating fibromyalgia pain, the method comprising the step of administering subcutaneously or intramuscularly a therapeutically effective amount of a botulinum toxin to a peripheral location of a body of a patient, wherein the patient has a locus of pain at a fibromyalgia tender point, and wherein the peripheral location is not at the locus of pain, and the locus of pain and the site of administration are located within a same dermatome, thereby relieving the pain for at least one month.

11. The method of claim 10 wherein the patient has at least eleven loci of pain.

12. The method of claim 10 wherein the botulinum toxin is selected from the group consisting of botulinum neurotoxin types A, B, C, D, E, F, and G.

13. The method of claim 10 wherein the botulinum toxin is a botulinum toxin type A.

14. The method of claim 10 wherein the location of peripheral administration and the locus of pain have neuronal processes that are projected from the same spinal sensory nerve root.

15. The method of claim 10 wherein the botulinum toxin is administered with a needle.

16. The method of claim 10 wherein the botulinum toxin is administered by needleless injection.

17. A method for treating fibromyalgia, the method comprising the step of administering subcutaneously or intramuscularly a therapeutically effective amount of a botulinum toxin to a dermatome of a patient afflicted with fibromyalgia, wherein the dermatome encompasses 50% or more of a locus of pain, wherein the administration is not at the locus of pain, thereby relieving a fibromyalgia pain for at least one month.

18. The method of claim 17 wherein the botulinum toxin is selected from the group consisting of botulinum toxin types A, B, C, D, E, F, and G.

19. The method of claim 17 wherein the botulinum toxin is a botulinum toxin type A.

20. The method of claim 17 wherein the location of administration and the locus of pain have neuronal processes that are projected from the same spinal sensory nerve root.

21. The method of claim 17 wherein the botulinum toxin is administered with a needle.

22. The method of claim 17 wherein the botulinum toxin is administered by needleless injection.

23. A method for treating fibromyalgia pain, the method comprising the step of administering subcutaneously or intramuscularly a therapeutically effective amount of a botulinum toxin to a dermatome of a patient, wherein the patient has a locus of pain at a fibromyalgia tender point, wherein the dermatome

encompasses 50% or more of the locus of pain, and wherein the administration is not at the locus of pain, thereby relieving the pain for at least one month.

24. The method of claim 23 wherein the patient has at least eleven loci of pain.

25. The method of claim 23 wherein the locus of pain and the peripheral location are located within a dermatome.

26. The method of claim 23 wherein the botulinum toxin is selected from the group consisting of botulinum neurotoxin types A, B, C, D, E, F, and G.

27. The method of claim 23 wherein the botulinum toxin is a botulinum toxin type A.

28. The method of claim 23 wherein the location of administration and the locus of pain have neuronal processes that are projected from the same spinal sensory nerve root.

29. The method of claim 23 wherein the botulinum toxin is administered with a needle.

30. The method of claim 23 wherein the botulinum toxin is administered by needleless injection.

31. A method for treating fibromyalgia, the method comprising the step of administering subcutaneously or intramuscularly a therapeutically effective amount of a botulinum toxin type A to a dermatome of a patient afflicted with fibromyalgia, wherein the dermatome encompasses 50% or more of a locus of pain which is at a fibromyalgia tender point, and wherein the local administration is not at the locus of pain, thereby relieving a fibromyalgia pain for at least one month.

32. A method for treating fibromyalgia pain, the method comprising the step of administering subcutaneously or intramuscularly a therapeutically effective amount of a botulinum toxin type A to a dermatome of a patient, wherein the patient has a locus of pain which is at a fibromyalgia tender point, wherein the dermatome encompasses 50% or more of the locus of pain, and wherein the administration is not at the locus of pain, thereby relieving the pain for at least one month.

## WEST Search History

DATE: Tuesday, July 06, 2004

| <u>Hide?</u>   | <u>Set</u> | <u>Name</u>  | <u>Query</u>  | <u>Hit Count</u> |
|--|------------|--|---|------------------|
| <i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=AND</i> |            |  |   |                  |
| <input type="checkbox"/>                                       | L1         | donovan.in. or allergan.asp.   |   | 5142             |
| <input type="checkbox"/>                                       | L2         | (botulinum or botulism or neurotoxin or neuro-toxin or toxin).ti,ab,clm. |   | 13773            |
| <input type="checkbox"/>                                       | L3         | L2   | (L1 or L2) and (cranium or intracranial or intra-cranial or brain or stem or pons | 13773            |
| <input type="checkbox"/>                                       | L4         |  | or cerebellum or cerebrum or spinal or dorsal or cere-bellum or cere-brum or      | 3704             |
|  |            |  | skull)  |                  |
| <input type="checkbox"/>                                       | L5         | L4 and (brain near5 stem)  |   | 89               |
| <input type="checkbox"/>                                       | L6         | L5 or l4 not stem  | (L1 or L2) and (cranium or intracranial or intra-cranial or brain or pons or      | 1847             |
| <input type="checkbox"/>                                       | L7         |  | cerebellum or cerebrum or spinal or dorsal or cere-bellum or cere-brum or         | 2539             |
|  |            |  | skull)  |                  |
| <input type="checkbox"/>                                       | L8         | L7 and l1  |   | 284              |
| <input type="checkbox"/>                                       | L9         | L8 and l2  |   | 122              |

END OF SEARCH HISTORY

## Search Results - Record(s) 22 through 71 of 122 returned.

22. 20030178029. 14 Mar 02. 25 Sep 03. Method for determining effect of a clostridial toxin upon a muscle. Hanin, Lisa D. 428/898; A61B019/00.

23. 20030165541. 25 Feb 02. 04 Sep 03. Methods for treating inflammation pain. Donovan, Stephen. 424/236.1; 514/2 A61K039/08 A61K038/02.

24. 20030138460. 07 Feb 03. 24 Jul 03. Methods of treating animals with botulinum toxin pharmaceutical compositions. Hunt, Terrence J. 424/239.1; 514/54 A61K039/08 A61K031/715.

25. 20030138437. 07 Feb 03. 24 Jul 03. Reduced toxicity clostridial toxin pharmaceutical compositions. Hunt, Terrence J. 424/184.1; A61K039/00 A61K039/38.

26. 20030118598. 05 Nov 02. 26 Jun 03. Clostridial toxin pharmaceutical compositions. Hunt, Terrence J. 424/184.1; A61K039/00 A61K039/38.

27. 20030054975. 17 Sep 01. 20 Mar 03. Methods for treating fibromyalgia. Voet, Martin A.. 514/2; A61K038/16.

28. 20030032891. 16 Jul 02. 13 Feb 03. Pinna reflex assay. Jenkins, Jennifer A.. 600/546; 73/379.01 A61B005/04.

29. 20030027752. 20 Jul 01. 06 Feb 03. Leucine-based motif and clostridial neurotoxins. Steward, Lance E. et al. 514/12; 530/350 A61K038/17 C07K014/435.

30. 20030026760. 29 Jul 02. 06 Feb 03. Methods of determining the effects of toxins. Holland, James M., et al. 424/9.2; 424/239.1 435/6 A61K049/00 C12Q001/68 A61K039/08.

31. 20020192240. 23 May 02. 19 Dec 02. Therapy for injured muscles. Brooks, Gregory F., et al. 424/247.1; A61K039/08.

32. 20020177545. 15 Mar 01. 28 Nov 02. Compositions and methods for treating gonadotrophin related illnesses. Donovan, Stephen. 514/2; 514/12 514/15 A61K038/16 A61K038/10 A61K038/08.

33. 20020176872. 18 Jul 02. 28 Nov 02. Pain treatment by peripheral administration of a neurotoxin. Aoki, Kei Roger, et al. 424/247.1; A61K039/08.

34. 20020142010. 22 May 02. 03 Oct 02. Method and compositions for the treatment of cerebral palsy. Graham, Herbert Kerr. 424/247.1; A61K039/08.

35. 20020107199. 17 Jan 02. 08 Aug 02. Methods of administering botulinum toxin. Walker, Patricia S.. 514/12; 514/44 A61K048/00 A61K038/16.

36. 20020102275. 22 Mar 02. 01 Aug 02. Methods and compositions for the treatment of cerebral palsy. Graham, Herbert Kerr. 424/247.1; A61K039/08.

37. 20020102274. 15 Mar 02. 01 Aug 02. Clostridial toxin therapy for Hashimoto's thyroiditis.

Voet, Martin A., et al. 424/247.1; A61K039/08.

---

38. 20020098237. 11 Mar 02. 25 Jul 02. Neurotoxin implant. Donovan, Stephen, et al. 424/484; 514/2 A61K038/17 A61K009/14.

---

39. 20020094339. 08 Feb 02. 18 Jul 02. Methods for treating mammary gland disorders. Brin, Mitchell F., et al. 424/247.1; A61K039/08.

---

40. 20020086036. 05 Dec 00. 04 Jul 02. Methods for treating hyperhidrosis. Walker, Patricia S. 424/236.1; 424/489 A61K039/02 A61K009/14.

---

41. 20020082197. 06 Dec 01. 27 Jun 02. Method for treating a mucus secretion. Aoki, Kei Roger, et al. 514/2; A61K038/16.

---

42. 20020081319. 30 Oct 01. 27 Jun 02. Botulinum toxin therapy for hashimoto's thyroiditis. Voet, Martin A., et al. 424/239.1; 514/2 530/350 A01N037/18 A61K038/00 A61K039/08 C07K001/00 C07K014/00 C07K017/00.

---

43. 20020068699. 23 Aug 01. 06 Jun 02. Clostridial toxin derivatives and methods for treating pain. Donovan, Stephen. 514/12; 530/350 A61K039/08 C07K014/33.

---

44. 20020064536. 14 Jan 02. 30 May 02. Methods of treating animals with botulinum toxin pharmaceutical compositions. Hunt, Terrence J. 424/247.1; 514/54 A61K039/08 A61K031/715.

---

45. 20020037833. 03 Aug 01. 28 Mar 02. Clostridial toxin derivatives and methods for treating pain. Donovan, Stephen. 514/2; A61K038/16.

---

46. 20020031529. 03 Oct 01. 14 Mar 02. Neurotoxin therapy for diabetes. Donovan, Stephen. 424/247.1; A61K039/29.

---

47. 20020028244. 07 Aug 01. 07 Mar 02. Biodegradable neurotoxin implant. Donovan, Stephen, et al. 424/486; 514/2 A61K009/14 A61K038/17.

---

48. 20020028216. 04 Oct 01. 07 Mar 02. Botulinum toxin implant. Donovan, Stephen. 424/236.1; A61K039/02.

---

49. 20020018786. 04 Oct 01. 14 Feb 02. Method for treating parathyroid disorders. Donovan, Stephen. 424/247.1; A61K039/08.

---

50. 20020010138. 30 Apr 01. 24 Jan 02. Treatment of neuromuscular disorders and conditions with different botulinum. Aoki, K. Roger, et al. 514/12; A61K039/02.

---

51. 20020006905. 16 Jul 01. 17 Jan 02. Use of botulinum toxins for treating various disorders and conditions and associated pain. Aoki, K. Roger, et al. 514/12; A61K038/16.

---

52. 20010053370. 11 Jul 01. 20 Dec 01. Parkinson's disease treatment. Donovan, Stephen. 424/239.1; A61K039/08.

---

53. 20010053369. 12 Jul 01. 20 Dec 01. Epilepsy treatment. Donovan, Stephen. 424/239.1; A61K039/08.

---

54. 20010046962. 06 Jul 01. 29 Nov 01. Method and compositions for the treatment of cerebral palsy. Graham, Herbert Kerr. 514/21; A61K038/18.

55. 20010041181. 15 Jun 01. 15 Nov 01. Method for treating essential tremor with botulinum toxin type B. Aoki, K. Roger, et al. 424/184.1; A61K038/16.

56. 20010025024. 24 May 01. 27 Sep 01. Neurotoxin therapy for inner ear disorders. Donovan, Stephen. 514/2; A61K038/02.

57. 20010023243. 16 Apr 01. 20 Sep 01. Method for treating parathyroid disorders. Donovan, Stephen. 514/12; 514/2 A61K038/00 A01N037/18.

58. 20010021695. 30 Apr 01. 13 Sep 01. Multiple botulinum toxins for treating neuromuscular disorders and conditions. Aoki, K. Roger, et al. 514/2; A61K038/16.

59. 20010012833. 15 Mar 01. 09 Aug 01. Method for treating neuromuscular disorders and conditions with botulinum toxin types A and B. Aoki, K. Roger, et al. 514/12; A61K038/16.

60. 6743424. 02 Nov 00; 01 Jun 04. Method for treating hyperthyroidism. Donovan; Stephen. 424/94.5; 424/234.1 424/239.1 424/247.1 424/94.1 514/12 514/2. A61K038/51 A61K038/44 A61K039/08.

61. 6740321. 02 Nov 00; 25 May 04. Method for treating thyroid disorders with a botulinum toxin. Donovan; Stephen. 424/94.6; 424/239.1 424/94.1 424/94.5 514/12 514/2. A61K038/43 A61K039/08 A61K038/52 A61K038/16.

62. 6716427. 02 Nov 00; 06 Apr 04. Method for treating hypocalcemia. Donovan; Stephen. 424/94.5; 424/239.1 424/94.1 514/12 514/2. A61K038/48 A61K038/43 A61K039/08.

63. 6688311. 14 Mar 02; 10 Feb 04. Method for determining effect of a clostridial toxin upon a muscle. Hanin; Lisa D.. 128/898; 600/300. A61B019/00.

64. 6683049. 24 Jan 00; 27 Jan 04. Method for treating a cholinergic influenced sweat gland. Aoki; K. Roger, et al. 514/2; 424/115 424/236.1 424/239.1 514/12. A61K039/08 C07K014/33.

65. 6649161. 01 Nov 00; 18 Nov 03. Method for treating hypocalcemia. Donovan; Stephen. 424/94.5; 424/239.1 424/94.1 514/12 514/2. A61K038/51 A61K038/44 A61K039/08.

66. 6645496. 28 Feb 01; 11 Nov 03. Method for treating tardive dyskinesia with Botulinum toxin type B. Aoki; K. Roger, et al. 424/184.1; 424/236.1 424/239.1 424/247.1 435/71.3 514/2 530/350. A61K039/08.

67. 6641820. 25 Jul 00; 04 Nov 03. Clostridial toxin derivatives and methods to treat pain. Donovan; Stephen. 424/239.1; 435/252.3 435/320.1 435/325 435/69.1 435/69.7 435/70.1 514/12 514/14 514/2 530/350 530/412. C07K019/00 C07K014/33 A61K038/16.

68. 6635247. 16 Apr 01; 21 Oct 03. Hypoparathyroid therapy. Donovan; Stephen. 424/94.5; 424/234.1 424/239.1 424/247.1 424/94.1 514/12 514/2. A61K038/51 A61K038/44 A61K039/08.

69. 6632433. 18 Jun 01; 14 Oct 03. Method for treating cervical dystonia with botulinum toxin

type B. Aoki; K. Roger, et al. 424/184.1; 424/236.1 424/239.1 424/247.1 435/71.3 514/2 530/350. A61K039/08 C07K014/33.

□ 70. 6623742. 17 Sep 01; 23 Sep 03. Methods for treating fibromyalgia. Voet; Martin A. 424/236.1; 424/247.1 435/71.3 514/12 514/2 530/344 530/350. A61K039/08 C07K014/33.

□ 71. 6620415. 11 Jul 01; 16 Sep 03. Parkinson's disease treatment. Donovan; Stephen. 424/239.1; 424/197.11 424/234.1 424/236.1 424/408 514/2 514/937 514/963. A61K039/08 A61K039/385 A01N037/18.

[Generate Collection](#)

[Print](#)

| Terms     | Documents |
|-----------|-----------|
| L8 and L2 | 122       |

[Prev Page](#)   [Next Page](#)   [Go to Doc#](#)

**Search Results - Record(s) 1 through 50 of 122 returned.**

---

- 1. 20040126397. 02 Dec 03. 01 Jul 04. Use of the neurotoxic component of a botulinum toxin for treating various disorders and conditions and associated pain. Aoki, Kei Roger, et al. 424/239.1; A61K039/08.
- 2. 20040126396. 21 May 03. 01 Jul 04. Botulinum toxin treatment for strabismus. Aoki, Kei Roger, et al. 424/239.1; A61K039/08.
- 3. 20040115215. 05 Dec 03. 17 Jun 04. Recombinant botulinum toxins with a soluble C-terminal portion, an N-terminal portion and a light chain. Williams, James A.. 424/184.1; A61K039/395 A61K039/00 A61K039/38.
- 4. 20040115139. 15 Oct 03. 17 Jun 04. Botulinum toxin dental therapies and procedures. Katz, Howard I., et al. 424/50; 433/217.1 A61K007/28 A61C005/00.
- 5. 20040086532. 05 Nov 02. 06 May 04. Botulinum toxin formulations for oral administration. Donovan, Stephen. 424/239.1; A61K039/08.
- 6. 20040086531. 05 Nov 02. 06 May 04. Methods for treating ulcers and gastroesophageal reflux disease. Barron, Richard L.. 424/239.1; A61K039/08.
- 7. 20040062776. 18 Sep 03. 01 Apr 04. Botulinum toxin therapy for fibromyalgia. Voet, Martin A.. 424/239.1; A61K039/08.
- 8. 20040060569. 15 Sep 03. 01 Apr 04. Surface topography method for determining effect of a botulinum toxin upon a muscle. Hanin, Lisa D.. 128/898; A61B019/00.
- 9. 20040037852. 21 May 03. 26 Feb 04. Botulinum toxin therapy for lower back pain. Aoki, Kei Roger, et al. 424/239.1; A61K039/08.
- 10. 20040033241. 23 May 03. 19 Feb 04. Controlled release botulinum toxin system. Donovan, Stephen. 424/239.1; A61K039/08.
- 11. 20040033229. 21 Mar 03. 19 Feb 04. PSMA antibodies and protein multimers. Maddon, Paul J., et al. 424/155.1; 435/7.23 530/388.8 G01N033/574 A61K039/395 C07K016/30.
- 12. 20040018213. 29 Jul 03. 29 Jan 04. Pain treatment by peripheral administration of a neurotoxin. Aoki, Kei Roger, et al. 424/239.1; A61K039/08.
- 13. 20040018212. 29 Jul 03. 29 Jan 04. Joint pain treatment by peripheral administration of a neurotoxin. Aoki, Kei Roger, et al. 424/239.1; A61K039/08.
- 14. 20040013692. 16 Jul 03. 22 Jan 04. Use of botulinum toxins for treating various disorders and conditions and associated pain. Aoki, K. Roger, et al. 424/239.1; A61K039/08.
- 15. 20040009180. 11 Jul 02. 15 Jan 04. Transdermal botulinum toxin compositions. Donovan, Stephen. 424/184.1; A61K039/00 A61K039/38 A61K009/70 A61F013/00.

---

---

16. 20030219462. 04 Jun 02. 27 Nov 03. Clostridial neurotoxin compositions and modified clostridial neurotoxins. Steward, Lance E., et al. 424/239.1; 435/317.1 A61K039/08 C12N001/00.

17. 20030219457. 15 Oct 02. 27 Nov 03. Soluble recombinant botulinum toxins. Williams, James A.. 424/199.1; 424/186.1 424/234.1 435/6 C12Q001/68 A61K039/12 A61K039/02.

18. 20030215468. 30 Jan 03. 20 Nov 03. Soluble recombinant botulinum toxin proteins. Williams, James A., et al. 424/239.1; 435/252.3 435/70.21 530/388.4 A61K039/08 C12P021/04 C12N001/21 C07K016/12.

19. 20030211121. 10 May 02. 13 Nov 03. Therapeutic treatments for neuropsychiatric disorders. Donovan, Stephen. 424/247.1; A61K039/08.

20. 20030202990. 22 Apr 03. 30 Oct 03. Intracranial botulinum toxin therapy for focal epilepsy. Donovan, Stephen, et al. 424/239.1; A61K039/08.

21. 20030185860. 01 Apr 02. 02 Oct 03. Methods for treating cardiovascular diseases with botulinum toxin. Brooks, Gregory F.. 424/247.1; A61K039/08.

22. 20030178029. 14 Mar 02. 25 Sep 03. Method for determining effect of a clostridial toxin upon a muscle. Hanin, Lisa D.. 128/898; A61B019/00.

23. 20030165541. 25 Feb 02. 04 Sep 03. Methods for treating inflammation pain. Donovan, Stephen. 424/236.1; 514/2 A61K039/08 A61K038/02.

24. 20030138460. 07 Feb 03. 24 Jul 03. Methods of treating animals with botulinum toxin pharmaceutical compositions. Hunt, Terrence J.. 424/239.1; 514/54 A61K039/08 A61K031/715.

25. 20030138437. 07 Feb 03. 24 Jul 03. Reduced toxicity clostridial toxin pharmaceutical compositions. Hunt, Terrence J.. 424/184.1; A61K039/00 A61K039/38.

26. 20030118598. 05 Nov 02. 26 Jun 03. Clostridial toxin pharmaceutical compositions. Hunt, Terrence J.. 424/184.1; A61K039/00 A61K039/38.

27. 20030054975. 17 Sep 01. 20 Mar 03. Methods for treating fibromyalgia. Voet, Martin A.. 514/2; A61K038/16.

28. 20030032891. 16 Jul 02. 13 Feb 03. Pinna reflex assay. Jenkins, Jennifer A.. 600/546; 73/379.01 A61B005/04.

29. 20030027752. 20 Jul 01. 06 Feb 03. Leucine-based motif and clostridial neurotoxins. Steward, Lance E., et al. 514/12; 530/350 A61K038/17 C07K014/435.

30. 20030026760. 29 Jul 02. 06 Feb 03. Methods of determining the effects of toxins. Holland, James M., et al. 424/9.2; 424/239.1 435/6 A61K049/00 C12Q001/68 A61K039/08.

31. 20020192240. 23 May 02. 19 Dec 02. Therapy for injured muscles. Brooks, Gregory F., et al. 424/247.1; A61K039/08.

---

- 32. 20020177545. 15 Mar 01. 28 Nov 02. Compositions and methods for treating gonadotrophin related illnesses. Donovan, Stephen. 514/2; 514/12 514/15 A61K038/16 A61K038/10 A61K038/08.
- 33. 20020176872. 18 Jul 02. 28 Nov 02. Pain treatment by peripheral administration of a neurotoxin. Aoki, Kei Roger, et al. 424/247.1; A61K039/08.
- 34. 20020142010. 22 May 02. 03 Oct 02. Method and compositions for the treatment of cerebral palsy. Graham, Herbert Kerr. 424/247.1; A61K039/08.
- 35. 20020107199. 17 Jan 02. 08 Aug 02. Methods of administering botulinum toxin. Walker, Patricia S. 514/12; 514/44 A61K048/00 A61K038/16.
- 36. 20020102275. 22 Mar 02. 01 Aug 02. Methods and compositions for the treatment of cerebral palsy. Graham, Herbert Kerr. 424/247.1; A61K039/08.
- 37. 20020102274. 15 Mar 02. 01 Aug 02. Clostridial toxin therapy for Hashimoto's thyroiditis. Voet, Martin A., et al. 424/247.1; A61K039/08.
- 38. 20020098237. 11 Mar 02. 25 Jul 02. Neurotoxin implant. Donovan, Stephen, et al. 424/484; 514/2 A61K038/17 A61K009/14.
- 39. 20020094339. 08 Feb 02. 18 Jul 02. Methods for treating mammary gland disorders. Brin, Mitchell F., et al. 424/247.1; A61K039/08.
- 40. 20020086036. 05 Dec 00. 04 Jul 02. Methods for treating hyperhidrosis. Walker, Patricia S. 424/236.1; 424/489 A61K039/02 A61K009/14.
- 41. 20020082197. 06 Dec 01. 27 Jun 02. Method for treating a mucus secretion. Aoki, Kei Roger, et al. 514/2; A61K038/16.
- 42. 20020081319. 30 Oct 01. 27 Jun 02. Botulinum toxin therapy for hashimoto's thyroiditis. Voet, Martin A., et al. 424/239.1; 514/2 530/350 A01N037/18 A61K038/00 A61K039/08 C07K001/00 C07K014/00 C07K017/00.
- 43. 20020068699. 23 Aug 01. 06 Jun 02. Clostridial toxin derivatives and methods for treating pain. Donovan, Stephen. 514/12; 530/350 A61K039/08 C07K014/33.
- 44. 20020064536. 14 Jan 02. 30 May 02. Methods of treating animals with botulinum toxin pharmaceutical compositions. Hunt, Terrence J. 424/247.1; 514/54 A61K039/08 A61K031/715.
- 45. 20020037833. 03 Aug 01. 28 Mar 02. Clostridial toxin derivatives and methods for treating pain. Donovan, Stephen. 514/2; A61K038/16.
- 46. 20020031529. 03 Oct 01. 14 Mar 02. Neurotoxin therapy for diabetes. Donovan, Stephen. 424/247.1; A61K039/29.
- 47. 20020028244. 07 Aug 01. 07 Mar 02. Biodegradable neurotoxin implant. Donovan, Stephen, et al. 424/486; 514/2 A61K009/14 A61K038/17.
- 48. 20020028216. 04 Oct 01. 07 Mar 02. Botulinum toxin implant. Donovan, Stephen. 424/236.1;

A61K039/02.

49. 20020018786. 04 Oct 01. 14 Feb 02. Method for treating parathyroid disorders. Donovan, Stephen. 424/247.1; A61K039/08.

50. 20020010138. 30 Apr 01. 24 Jan 02. Treatment of neuromuscular disorders and conditions with different botulinum. Aoki, K. Roger, et al. 514/12; A61K039/02.

[Generate Collection](#)

[Print](#)

| Terms     | Documents |
|-----------|-----------|
| L8 and L2 | 122       |

[Prev Page](#)   [Next Page](#)   [Go to Doc#](#)

[Generate Collection](#)[Print](#)**Search Results - Record(s) 51 through 100 of 122 returned.**

---

51. 20020006905. 16 Jul 01. 17 Jan 02. Use of botulinum toxins for treating various disorders and conditions and associated pain. Aoki, K. Roger, et al. 514/12; A61K038/16.

---

52. 20010053370. 11 Jul 01. 20 Dec 01. Parkinson's disease treatment. Donovan, Stephen. 424/239.1; A61K039/08.

---

53. 20010053369. 12 Jul 01. 20 Dec 01. Epilepsy treatment. Donovan, Stephen. 424/239.1; A61K039/08.

---

54. 20010046962. 06 Jul 01. 29 Nov 01. Method and compositions for the treatment of cerebral palsy. Graham, Herbert Kerr. 514/21; A61K038/18.

---

55. 20010041181. 15 Jun 01. 15 Nov 01. Method for treating essential tremor with botulinum toxin type B. Aoki, K. Roger, et al. 424/184.1; A61K038/16.

---

56. 20010025024. 24 May 01. 27 Sep 01. Neurotoxin therapy for inner ear disorders. Donovan, Stephen. 514/2; A61K038/02.

---

57. 20010023243. 16 Apr 01. 20 Sep 01. Method for treating parathyroid disorders. Donovan, Stephen. 514/12; 514/2 A61K038/00 A01N037/18.

---

58. 20010021695. 30 Apr 01. 13 Sep 01. Multiple botulinum toxins for treating neuromuscular disorders and conditions. Aoki, K. Roger, et al. 514/2; A61K038/16.

---

59. 20010012833. 15 Mar 01. 09 Aug 01. Method for treating neuromuscular disorders and conditions with botulinum toxin types A and B. Aoki, K. Roger, et al. 514/12; A61K038/16.

---

60. 6743424. 02 Nov 00; 01 Jun 04. Method for treating hyperthyroidism. Donovan; Stephen. 424/94.5; 424/234.1 424/239.1 424/247.1 424/94.1 514/12 514/2. A61K038/51 A61K038/44 A61K039/08.

---

61. 6740321. 02 Nov 00; 25 May 04. Method for treating thyroid disorders with a botulinum toxin. Donovan; Stephen. 424/94.6; 424/239.1 424/94.1 424/94.5 514/12 514/2. A61K038/43 A61K039/08 A61K038/52 A61K038/16.

---

62. 6716427. 02 Nov 00; 06 Apr 04. Method for treating hypocalcemia. Donovan; Stephen. 424/94.5; 424/239.1 424/94.1 514/12 514/2. A61K038/48 A61K038/43 A61K039/08.

---

63. 6688311. 14 Mar 02; 10 Feb 04. Method for determining effect of a clostridial toxin upon a muscle. Hanin; Lisa D.. 128/898; 600/300. A61B019/00.

---

64. 6683049. 24 Jan 00; 27 Jan 04. Method for treating a cholinergic influenced sweat gland. Aoki; K. Roger, et al. 514/2; 424/115 424/236.1 424/239.1 514/12. A61K039/08 C07K014/33.

---

65. 6649161. 01 Nov 00; 18 Nov 03. Method for treating hypocalcemia. Donovan; Stephen. 424/94.5; 424/239.1 424/94.1 514/12 514/2. A61K038/51 A61K038/44 A61K039/08.

---

- 66. 6645496. 28 Feb 01; 11 Nov 03. Method for treating tardive dyskinesia with Botulinum toxin type B. Aoki; K. Roger, et al. 424/184.1; 424/236.1 424/239.1 424/247.1 435/71.3 514/2 530/350. A61K039/08.
- 67. 6641820. 25 Jul 00; 04 Nov 03. Clostridial toxin derivatives and methods to treat pain. Donovan; Stephen. 424/239.1; 435/252.3 435/320.1 435/325 435/69.1 435/69.7 435/70.1 514/12 514/14 514/2 530/350 530/412. C07K019/00 C07K014/33 A61K038/16.
- 68. 6635247. 16 Apr 01; 21 Oct 03. Hypoparathyroid therapy. Donovan; Stephen. 424/94.5; 424/234.1 424/239.1 424/247.1 424/94.1 514/12 514/2. A61K038/51 A61K038/44 A61K039/08.
- 69. 6632433. 18 Jun 01; 14 Oct 03. Method for treating cervical dystonia with botulinum toxin type B. Aoki; K. Roger, et al. 424/184.1; 424/236.1 424/239.1 424/247.1 435/71.3 514/2 530/350. A61K039/08 C07K014/33.
- 70. 6623742. 17 Sep 01; 23 Sep 03. Methods for treating fibromyalgia. Voet; Martin A.. 424/236.1; 424/247.1 435/71.3 514/12 514/2 530/344 530/350. A61K039/08 C07K014/33.
- 71. 6620415. 11 Jul 01; 16 Sep 03. Parkinson's disease treatment. Donovan; Stephen. 424/239.1; 424/197.11 424/234.1 424/236.1 424/408 514/2 514/937 514/963. A61K039/08 A61K039/385 A01N037/18.
- 72. 6585993. 11 Mar 02; 01 Jul 03. Controlled release neurotoxin system. Donovan; Stephen, et al. 424/423; 424/236.1 424/239.1 424/247.1 424/422 424/484 424/486. A61F002/00 A61F013/00 A61K009/14 A61K039/02 A61K039/08.
- 73. 6585970. 02 Nov 00; 01 Jul 03. Method for treating hypothyroidism. Donovan; Stephen. 424/94.5; 424/234.1 424/239.1 424/247.1 424/94.1 514/12 514/2. A61K038/51 A61K038/44 A61K039/08.
- 74. 6565870. 28 Apr 00; 20 May 03. Methods for treating bone tumors. Donovan; Stephen. 424/423;. A61K009/00.
- 75. 6524580. 15 Feb 00; 25 Feb 03. Method for treating thyroid disorders. Donovan; Stephen. 424/94.5; 424/234.1 424/239.1 424/247.1 424/94.1 514/12. A61K038/51 A61K038/44 A61K039/08.
- 76. 6506399. 04 Oct 01; 14 Jan 03. Biodegradable botulinum toxin implant. Donovan; Stephen. 424/423; 424/184.1 424/236.1 424/422 424/426. A61K039/02 A61K039/00.
- 77. 6500436. 03 Aug 01; 31 Dec 02. Clostridial toxin derivatives and methods for treating pain. Donovan; Stephen. 424/239.1; 435/252.3 435/320.1 435/325 435/68.1 435/69.1 435/70.1 514/12 514/2 530/350 530/412 536/23.1. C07K019/00 C07K014/33 A61K038/16.
- 78. 6458365. 19 Jan 00; 01 Oct 02. Method for treating headache. Aoki; K. Roger, et al. 424/239.1; 424/236.1 424/247.1 435/71.3 514/2 530/350 930/10. A61K039/08 C07K014/33.
- 79. 6448231. 06 Jul 01; 10 Sep 02. Method and compositions for the treatment of cerebral palsy. Graham; Herbert Kerr. 514/21; 424/184.1 424/236.1 424/247.1 514/12 530/350. A61K038/00 A61K039/00 C07K014/33.

---

80. 6447785. 02 Nov 00; 10 Sep 02. Method for treating hypercalcemia. Donovan; Stephen. 424/239.1; 424/167.1 424/236.1 514/12 514/2 530/350. A61K039/08 A61K038/00 A61K039/02.

81. 6423319. 04 Oct 00; 23 Jul 02. Methods for treating muscle injuries. Brooks; Gregory F, et al. 424/239.1; 424/236.1 435/252.3 435/320.1 435/325 435/69.1 514/12 514/2 530/350 530/412 536/23.1. A61K039/08 A61K038/00.

82. 6416765. 03 Oct 01; 09 Jul 02. Neurotoxin therapy for diabetes. Donovan; Stephen. 424/236.1; 424/239.1 514/866. A61K039/02 A61K039/08.

83. 6395277. 27 Jun 94; 28 May 02. Method and compositions for the treatment of cerebral palsy. Graham; Herbert Kerr. 424/184.1; 424/236.1 424/247.1 514/2 514/21 530/350. A61K039/08 C07K014/33.

84. 6383509. 07 Aug 01; 07 May 02. Biodegradable neurotoxin implant. Donovan; Stephen, et al. 424/423; 424/236.1 424/247.1 424/422 424/484 424/486 514/964. A61F002/00 A61F013/00 A61K009/14 A61K039/02 A61K039/08.

85. 6372226. 01 Mar 01; 16 Apr 02. Intrap spinal botulinum toxin for treating pain. Aoki; Kei Roger, et al. 424/236.1; 424/247.1. A61K039/02.

86. 6368605. 02 Aug 00; 09 Apr 02. Method for treating cancer with a neurotoxin to improve patient function. Donovan; Stephen. 424/239.1; 424/184.1 424/234.1 424/236.1 424/247.1 514/2 530/350. A61K039/08 A61K039/00 A61K039/38 A61K039/02 A61K038/00.

87. 6358926. 24 May 01; 19 Mar 02. Neurotoxin therapy for inner ear disorders. Donovan; Stephen. 514/14;. A61K038/00.

88. 6358513. 24 Feb 00; 19 Mar 02. Method for treating Hashimoto's thyroiditis. Voet; Martin A., et al. 424/239.1; 424/236.1 424/247.1 514/12 514/2 530/350. A61K039/08 A61K038/00 C07K014/00 C07K017/00.

89. 6350455. 02 Aug 00; 26 Feb 02. Method for treating a catecholamine secretion. Donovan; Stephen. 424/239.1; 424/184.1 424/234.1 424/236.1 424/247.1 514/2 530/350. A61K039/00 A61K039/38 A61K038/02 A61K039/08 A01N037/18.

90. 6337075. 26 Jan 00; 08 Jan 02. Methods for treating diabetes. Donovan; Stephen. 424/236.1; 424/239.1 424/832 514/866. A61K039/02 A61K039/08.

91. 6333037. 25 May 00; 25 Dec 01. Methods for treating pain with a modified neurotoxin. Aoki; Kei Roger, et al. 424/236.1;. A61K039/08.

92. 6328977. 01 Nov 00; 11 Dec 01. Method for treating hyperparathyroidism. Donovan; Stephen. 424/239.1;. A61K039/08.

93. 6319506. 01 Nov 00; 20 Nov 01. Method for treating hypercalcemia. Donovan; Stephen. 424/239.1; A61K039/08.

94. 6319505. 24 Jan 00; 20 Nov 01. Method for treating dystonia with botulinum toxin types C to G. Aoki; K. Roger, et al. 424/236.1; 424/239.1 435/71.1 435/71.3 514/2 530/350. A61K038/16

A61K039/00.

---

95. 6312708. 21 Jul 00; 06 Nov 01. Botulinum toxin implant. Donovan; Stephen. 424/423; 424/184.1 424/236.1 424/422 424/426. A61K039/02 A61K039/00.

---

96. 6306423. 02 Jun 00; 23 Oct 01. Neurotoxin implant. Donovan; Stephen, et al. 424/423; 424/236.1 424/247.1 424/422 424/484 424/486 514/964. A61F002/00 A61F013/00 A61K009/14 A61K039/02 A61K039/08.

---

97. 6306403. 14 Jun 00; 23 Oct 01. Method for treating parkinson's disease with a botulinum toxin. Donovan; Stephen. 424/239.1; 424/197.11 424/408 514/2 514/963. A61K039/08 A61K039/385 A01N037/18.

---

98. 6290961. 24 Jan 00; 18 Sep 01. Method for treating dystonia with botulinum toxin type B. Aoki; K. Roger, et al. 424/184.1; 424/236.1 424/247.1 435/71.3 514/2 530/350. A61K039/08 C07K014/33.

---

99. 6265379. 13 Oct 99; 24 Jul 01. Method for treating otic disorders. Donovan; Stephen. 514/14; 424/236.1 424/239.1. A61K038/00 A61K039/02 A61K039/08.

---

100. 6261572. 31 Jul 00; 17 Jul 01. Method for treating a pancreatic disorder with a neurotoxin. Donovan; Stephen. 424/239.1; 424/236.1. A61K039/05 A61K039/02 A61K039/08.

---

[Generate Collection](#)

[Print](#)

| Terms     | Documents |
|-----------|-----------|
| L8 and L2 | 122       |

[Prev Page](#)   [Next Page](#)   [Go to Doc#](#)

[Generate Collection](#)[Print](#)**Search Results - Record(s) 101 through 122 of 122 returned.**

101. 6235289. 25 May 00; 22 May 01. Intraspinal methods for treating pain. Aoki; Kei Roger, et al. 424/236.1; 424/247.1. A61K039/08 A61K039/02.

102. 6203794. 01 May 97; 20 Mar 01. Modification of clostridial toxins for use as transport proteins. Dolly; James Oliver, et al. 424/184.1; 424/164.1 424/167.1 424/178.1 424/179.1 424/183.1 424/234.1 424/235.1 424/236.1 424/239.1 424/247.1 424/832 530/300 530/350. A61K039/395 A61K039/02 A61K038/00 C07K014/00.

103. 6143306. 11 Jan 00; 07 Nov 00. Methods for treating pancreatic disorders. Donovan; Stephen. 424/236.1; 424/239.1. A61K039/02 A61K039/08.

104. 6139845. 07 Dec 99; 31 Oct 00. Method for treating cancer with a neurotoxin. Donovan; Stephen. 424/236.1; 424/184.1 424/234.1 424/239.1 424/247.1 514/2. A61K039/00 A61K039/02 A61K039/08.

105. 6113915. 12 Oct 99; 05 Sep 00. Methods for treating pain. Aoki; Kei Roger, et al. 424/236.1; 424/247.1. A61K039/08.

106. 5721215. 20 Mar 96; 24 Feb 98. Injectable therapy for control of muscle spasms and pain related to muscle spasms. Aoki; Kei Roger, et al. 514/21; 128/898 514/2 604/506. A61K038/16 A61M013/00.

107. WO2004032934A. Treatment of a neurodegenerative condition of brain comprises administration of composition comprising brimonidine. DONELLO, J E, et al. A61K031/498 A61P025/16 A61P025/28.

108. WO2003099289A. Alleviation of pain e.g. neuropathic pain, visceral pain, post-operative pain, inflammatory pain, arthritic pain involves use of a composition comprising alpha-adrenergic agonist and a composition comprising selective alpha-2A antagonist. DONELLO, J E, et al. A61K031/137 A61K031/4164 A61K031/4166 A61K031/4168 A61K031/4178 A61K031/498 A61K031/538 A61P029/00.

109. US20030219462A. Composition useful for treating e.g. pain and neuromuscular disorders comprises a botulinum toxin light chain component or its modified form and an intracellular structure component. AOKI, K R, et al. A61K039/08 C12N001/00.

110. US20030211121A. Treating a neuropsychiatric disorder, e.g. schizophrenia, Alzheimer's disease, mania or anxiety, comprises administering intracranially a clostridial neurotoxin or a botulinum toxin to a patient. DONOVAN, S. A61K038/48 A61K039/08 A61P025/18 A61P025/22 A61P025/28.

111. US20030202990A. Treatment of epilepsy comprises intracranial administration of botulinum toxin to epileptogenic focus of patient. DONOVAN, S, et al. A61K039/08.

112. US20030027752A. Novel modified neurotoxin with a structural modification that alters biological persistence or activity of the modified neurotoxin relative to the unmodified neurotoxin, for treating tremors, bruxism and dysphagia. AOKI, K R, et al. A61K038/17 C07K014/435.

---

113. US20020082197A. Treating mucus secretion which is not a symptom of rhinorrhea comprises administering botulinum toxin. AOKI, K R, et al. A61K038/16.

114. WO 200234286A. Treating an endocrine disorder e.g. acromegaly involves intracranial administration of neurotoxin. DONOVAN, S. A61K038/00 A61K038/48 A61P005/00 A61P005/02 A61P005/06 A61P005/14 A61P015/08 A61P015/10 A61P015/16 A61P015/18 A61P043/00.

115. WO 200208268A. Novel modified neurotoxin comprising structural modification which alters the biological persistence and/or biological activity of a neurotoxin, useful for treating neuromuscular or autonomic disorder, or pain. AOKI, K R, et al. A61K038/16 A61P021/00 A61P029/02 A61P037/00 C07K014/33.

116. US 6333037B. Treating pain with recombinant botulinum toxin, administered into the spine or to a dorsal root ganglion, has a long-lasting action without side effects. AOKI, K R, et al. A61K039/08.

117. US20010053370A. Treating movement disorders such as Parkinson's disease, Huntington's chorea, Wilson's disease, Tourette's syndrome, epilepsy, chronic tremor and dystonia, by administering neurotoxins such as botulinum toxin type A. DONOVAN, S. A01N037/18 A61K039/08 A61K039/385.

118. US20010053369A. Treating movement disorders such as Parkinson's disease, Huntington's chorea, Wilson's disease, epilepsy, chronic tremor, dystonia and spasticity, by administering neurotoxins such as botulinum toxin type A. DONOVAN, S. A61K039/08.

---

119. US 6306403B. Reduction of dyskinesia of Parkinson's disease involves administration of botulinum toxin globus palladius or ventrolateral thalamus. DONOVAN, S. A01N037/18 A61K038/00 A61K038/48 A61K039/08 A61K039/385 A61K045/00 A61P021/02 A61P025/00 A61P025/08 A61P025/14 A61P025/16 A61P043/00.

---

120. US 6372226B. Treatment of pain e.g. inflammatory pain involves intraspinal administration of a neurotoxin to a mammal. AOKI, K R, et al. A61K038/16 A61K039/02.

---

121. WO 9955359A. Novel methods and compositions for extending the action of Clostridial neurotoxin used for modulating neurite outgrowth in damaged neural endplates. AOKI, K R, et al. A61K031/711 A61K031:70 A61K038/00 A61K038/16 A61K038/17 A61K038/18 A61K038/22 A61K038/27 A61K038/30 A61K038/39 A61K039/395 A61K045/00 A61K048/00 A61P021/02 A61P025/00 A61K038/16 A61K038:17 A61K039:395 A61K038/16 A61K038:17 A61K039:395 A61K031/70 A61P025:00 A61K038/16 A61K038:17 A61K039:395 A61K031/70 A61P025:00 A61K038/16 A61K038:17 A61K039:395.

---

122. EP 760681B. New chemical conjugates of Chlostridial neurotoxin cpds. - used for targetting agents to nerve cells, for treating nerve cell related disorders, botulism or tetanus. AOKI, K R, et al. A61K038/00 A61K038/16 A61K039/02 A61K039/395 A61K047/48 C07K014/00 C07K014/33.

---

| Terms     | Documents |
|-----------|-----------|
| L8 and L2 | 122       |

[Prev Page](#)   [Next Page](#)   [Go to Doc#](#)

First Hit

L9: Entry 1 of 122

File: PGPB

Jul 1, 2004

PGPUB-DOCUMENT-NUMBER: 20040126397

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040126397 A1

TITLE: Use of the neurotoxic component of a botulinum toxin for treating various disorders and conditions and associated pain

PUBLICATION-DATE: July 1, 2004

## INVENTOR-INFORMATION:

| NAME                 | CITY                | STATE | COUNTRY | RULE-47 |
|----------------------|---------------------|-------|---------|---------|
| Aoki, Kei Roger      | Coto De Caza        | CA    | US      |         |
| Grayston, Michael W. | Irvine              | CA    | US      |         |
| Carlson, Steven R.   | San Mateo           | CA    | US      |         |
| Leon, Judith M.      | San Juan Capistrano | CA    | US      |         |

US-CL-CURRENT: 424/239.1

## CLAIMS:

What is claimed is:

1. A method for treating strabismus, the method comprising the step of administering to a patient a therapeutically effective amount of a neurotoxic component of a botulinum toxin substantially free of a botulinum toxin complex protein.
2. The method of claim 1, wherein the botulinum toxin is selected from the group consisting of botulinum toxin types A, B, C, D, E, F and G.
3. The method of claim 1, wherein the neurotoxic component of the botulinum toxin has a molecular weight of about 150 kilodaltons.
4. The method of claim 1, wherein the botulinum toxin is a botulinum toxin type A.
5. A method for treating strabismus, the method comprising the step of administering to a patient a therapeutically effective amount of a neurotoxic component of a botulinum toxin type A substantially free of a botulinum toxin complex protein.
6. A method for treating blepharospasm, the method comprising the step of administering to a patient a therapeutically effective amount of a neurotoxic component of a botulinum toxin substantially free of a botulinum toxin complex protein.
7. The method of claim 6, wherein the botulinum toxin is selected from the group consisting of botulinum toxin types A, B, C, D, E, F and G.

8. The method of claim 6, wherein the neurotoxic component of the botulinum toxin has a molecular weight of about 150 kilodaltons.
9. The method of claim 6, wherein the botulinum toxin is a botulinum toxin type A.
10. A method for treating blepharospasm, the method comprising the step of administering to a patient a therapeutically effective amount of a neurotoxic component of a botulinum toxin type A substantially free of a botulinum toxin complex protein.
11. A method for treating cervical dystonia, the method comprising the step of administering to a patient a therapeutically effective amount of a neurotoxic component of a botulinum toxin substantially free of a botulinum toxin complex protein.
11. The method of claim 11, wherein the botulinum toxin is selected from the group consisting of botulinum toxin types A, B, C, D, E, F and G.
12. The method of claim 11, wherein the neurotoxic component of the botulinum toxin has a molecular weight of about 150 kilodaltons.
13. The method of claim 11, wherein the botulinum toxin is a botulinum toxin type A.
14. A method for treating cervical dystonia, the method comprising the step of administering to a patient a therapeutically effective amount of a neurotoxic component of a botulinum toxin type A substantially free of a botulinum toxin complex protein.
15. A method for treating neuromuscular disorders, the method comprising the step of administering to a patient a therapeutically effective amount of a neurotoxic component of a botulinum toxin substantially free of a botulinum toxin complex protein.
16. The method of claim 15, wherein the botulinum toxin is selected from the group consisting of botulinum toxin types A, B, C, D, E, F and G.
17. The method of claim 15, wherein the neurotoxic component of the botulinum toxin has a molecular weight of about 150 kilodaltons.
18. The method of claim 15, wherein the botulinum toxin is a botulinum toxin type A.
19. A method for treating a neuromuscular disorder, the method comprising the step of administering to a patient a therapeutically effective amount of a neurotoxic component of a botulinum toxin type A substantially free of a botulinum toxin complex protein.
20. A method for treating a cholinergic influenced secretion, the method comprising the step of administering to a patient a therapeutically effective amount of a neurotoxic component of a botulinum toxin substantially free of a botulinum toxin complex protein.
21. The method of claim 20, wherein the botulinum toxin is selected from the group consisting of botulinum toxin types A, B, C, D, E, F and G.

22. The method of claim 20, wherein the neurotoxic component of the botulinum toxin has a molecular weight of about 150 kilodaltons.

23. The method of claim 20, wherein the botulinum toxin is a botulinum toxin type A.

24. The method of claim 20, wherein the cholinergic influenced secretion is a sweat secretion.

25. A method for treating a cholinergic influenced secretion, the method comprising the step of administering to a patient a therapeutically effective amount of a neurotoxic component of a botulinum toxin type A substantially free of a botulinum toxin complex protein.

26. A method for treating a cholinergic influenced sweat secretion, the method comprising the step of administering to a patient a therapeutically effective amount of a neurotoxic component of a botulinum toxin type A substantially free of a botulinum toxin complex protein.

27. A method for treating a neuromuscular disorder or a cholinergic influenced secretion, the method comprising the step of administering to a patient a therapeutically effective amount of a neurotoxic component of a botulinum toxin substantially free of a botulinum toxin complex protein, wherein the neurotoxic component has a molecular weight of about 150 kilodaltons.

First Hit

L9: Entry 51 of 122

File: PGPB

Jan 17, 2002

PGPUB-DOCUMENT-NUMBER: 20020006905

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020006905 A1

TITLE: Use of botulinum toxins for treating various disorders and conditions and associated pain

PUBLICATION-DATE: January 17, 2002

## INVENTOR-INFORMATION:

| NAME                 | CITY          | STATE | COUNTRY | RULE-47 |
|----------------------|---------------|-------|---------|---------|
| Aoki, K. Roger       | Laguna Hills  | CA    | US      |         |
| Grayston, Michael W. | Irvine        | CA    | US      |         |
| Carlson, Steven R.   | Laguna Niguel | CA    | US      |         |
| Leon, Judith M.      | Laguna Niguel | CA    | US      |         |

US-CL-CURRENT: 514/12

## CLAIMS:

What is claimed is:

1. A method of treating cholinergic controlled secretions including excessive sweating, lacrimation and mucus secretion, said method comprising administering to the patient a therapeutically effective amount of Botulinum toxin type A in order to reduce the secretion.
2. The method according to claim 1 wherein the Botulinum toxin type A is administered to the patient's nerve plexus in an amount of between about 0.01 and about 50 units.
3. The method according to claim 1 wherein the Botulinum toxin type A is administered to the patient's ganglion in an amount of between about 0.01 and about 50 units.
4. The method according to claim 1 wherein the Botulinum toxin type A is administered to the patient's spinal cord in an amount of between about 0.01 and about 50 units.
5. The method according to claim 1 wherein the Botulinum toxin type A is administered to the patient's central nervous system in an amount of between about 0.01 and about 50 units.
6. A method for relieving pain associated with smooth muscle disorders, including spasms in the sphincters of the cardiovascular arteriole, gastrointestinal system, urinary, gall bladder and rectum, said method comprising administering to the patient a therapeutically effective amount of Botulinum toxin type A in order to relieve pain.

7. The method according to claim 6 wherein the Botulinum toxin type A is administered to the patient's pyloric valve in an amount between about 1 and about 50 units.

8. A method for treating smooth muscle disorders, including spasms in the sphincters of the cardiovascular arteriole, gastrointestinal system, urinary, gall bladder and rectum, said method comprising administering to the patient a therapeutically effective amount of Botulinum toxin type A in order to lessen the spasms.

9. The method according to claim 8 wherein the Botulinum toxin type A is administered to the patient's pyloric valve in an amount between about 1 and about 50 units.

10. A method for relieving pain associated with smooth muscle disorders, including spasms in the lower gastrointestinal muscles and rectum, said method comprising administering to the patient a therapeutically effective amount of Botulinum toxin type A in order to relieve pain.

11. The method according to claim 10 wherein the Botulinum toxin type A is administered to the patient's lower colon in an amount between about 0.01 and about 50 units.

12. A method for relieving pain associated with smooth muscle disorders, including spasms in the sphincters lower gastrointestinal muscles and rectum, said method comprising administering to the patient a therapeutically effective amount of Botulinum toxin type A in order to lessen the spasms.

13. The method according to claim 12 wherein the Botulinum toxin type A is administered to the patient's lower colon in an amount between about 0.01 and about 50 units.

14. A method for relieving pain associated with muscle spasms in conditions secondary to sports injuries, said method comprising administering to a patient a therapeutically effective amount of a Botulinum toxin of a type having short duration activity in order to relieve pain.

15. The method according to claim 14 wherein the Botulinum toxin comprises Botulinum toxin type F.

16. The method according to claim 15 wherein the therapeutic amount comprises a dose of between about 1 and about 10 units.

17. The method according to claim 16 wherein the muscle spasms occur in a patient's thigh and the Botulinum toxin is administered into the thigh

18. A method for relieving pain associated with contractions in arthritis, said method comprising administering to a patient a therapeutically effective amount of a Botulinum toxin in order to relieve pain.

19. A method for treating swallowing disorders, including spasms, said method comprising administering to the patient a therapeutically effective amount of Botulinum toxin type A.

20. A method for treating tension headache comprising administering to the patient a therapeutically effective amount of Botulinum toxin type A.

[First Hit](#) [Fwd Refs](#)[Previous Doc](#) [Next Doc](#) [Go to Doc#](#) [Generate Collection](#) [Print](#)

L9: Entry 78 of 122

File: USPT

Oct 1, 2002

DOCUMENT-IDENTIFIER: US 6458365 B1  
TITLE: Method for treating headache

Abstract Text (1):

A method and composition for treating a patient suffering from a disease, disorder or condition and associated pain include the administration to the patient of a therapeutically effective amount of a neurotoxin selected from a group consisting of Botulinum toxin types A, B, C, D, E, F and G.

Assignee Name (1):Allergan, Inc.Detailed Description Text (57):

A male, age 65, with excessive unilateral sweating is treated by administering 0.01 to 50 units, of Botulinum toxin, depending upon degree of desired effect. The larger the dose, usually the greater spread and duration of effect. Small doses are used initially. Any serotype toxin alone or in combination could be used in this indication. The administration is to the gland nerve plexus, ganglion, spinal cord or central nervous system to be determined by the physician's knowledge of the anatomy and physiology of the target glands and secretory cells. In addition, the appropriate spinal cord level or brain area can be injected with the toxin (although (although this would cause many effects, including general weakness). Thus, the gland (if accessible) or the nerve plexus or ganglion are the targets of choice. Excessive sweating, tearing (lacrimation), mucus secretion or gastrointestinal secretions are positively influenced by the cholinergic nervous system. Sweating and tearing are under greater cholinergic control than mucus or gastric secretion and would respond better to toxin treatment. However, mucus and gastric secretions could be modulated through the cholinergic system. All symptoms would be reduced or eliminated with toxin therapy in about 1-7 days. Duration would be weeks to several months.

Detailed Description Text (71):

The Use of Botulinum Toxin Types A-G in the Treatment of Muscle Spasms and Control of Pain Associated with Muscle Spasms in Spasticity Conditions Secondary to Stroke, Traumatic Brain or Spinal Cord Injury

## CLAIMS:

1. A method for treating tension headache comprising administering to a patient by intramuscular or subcutaneous injection a therapeutically effective amount of Botulinum toxin type A to a muscle of the head or upper neck of the patient, thereby relieving pain of a headache within one to seven days, wherein the headache is associated with a muscle contraction.
2. A method for treating headache, the method comprising the step of administering by intramuscular or subcutaneous injection an effective amount of a botulinum toxin to a muscle of the head or upper neck of a patient, thereby relieving a pain of a headache within one to seven days, wherein the headache is associated with a muscle contraction.

- 3. The method of claim 2, wherein the botulinum toxin is administered in an amount of between 0.01 units and 500 units.
- 4. The method of claim 2, wherein the botulinum toxin is administered in an amount of between 1 unit and 300 units.
- 5. The method of claim 2, wherein the botulinum toxin is administered in an amount of between 0.01 units and 50 units.
- 6. The method of claim 2, wherein the botulinum toxin is selected from the group consisting of botulinum toxin types A, B, C, D, E, F and G.
- 7. The method of claim 2, wherein the botulinum toxin is administered to a human patient.
- 9. A method for relieving tension headache, the method comprising the step of intramuscular injection into a cholinergic influenced muscle of the head or upper neck of a human patient of a therapeutically effective amount of botulinum toxin in order to relieve a pain associated with a tension headache within one to seven days.
- 11. The method of claim 9, wherein the botulinum toxin is selected from the group consisting of botulinum toxin types A, B, C, D, E, F and G.
- 12. A method of treating tension headache comprising administration by intramuscular or subcutaneous injection of a therapeutically effective amount of a botulinum toxin to a patient, thereby relieving pain associated with a tension headache within seven days.
- 13. A method for treating headache, the method comprising the step of administering by intramuscular or subcutaneous injection an effective amount of a botulinum toxin type A to a muscle of the head or upper neck of a patient, thereby relieving a pain of a headache within one to seven days, wherein the headache is associated with a muscle contraction.
- 14. A method for relieving tension headache, the method comprising the step of intramuscular injection into a cholinergic influenced muscle of the head or upper neck of a human patient of a therapeutically effective amount of botulinum toxin type A in order to relieve a pain associated with a tension headache within one to seven days.

[Previous Doc](#)[Next Doc](#)[Go to Doc#](#)

[First Hit](#) [Fwd Refs](#)[Previous Doc](#) [Next Doc](#) [Go to Doc#](#) [Generate Collection](#) [Print](#)

L9: Entry 81 of 122

File: USPT

Jul 23, 2002

DOCUMENT-IDENTIFIER: US 6423319 B1

TITLE: Methods for treating muscle injuries

Abstract Text (1):

Methods for treating an injured muscle by local administration of a neurotoxin, such as a botulinum toxin, to promote healing and/or to reduce the pain associated with an injured muscle.

Assignee Name (1):

Allergan Sales, Inc.

Brief Summary Text (20):

In vitro studies have indicated that botulinum toxin inhibits potassium cation induced release of both acetylcholine and norepinephrine from primary cell cultures of brainstem tissue. Additionally, it has been reported that botulinum toxin inhibits the evoked release of both glycine and glutamate in primary cultures of spinal cord neurons and that in brain synaptosome preparations botulinum toxin inhibits the release of each of the neurotransmitters acetylcholine, dopamine, norepinephrine, CGRP and glutamate.

Brief Summary Text (26):

Typically only a single type of small molecule neurotransmitter is released by each type of neuron in the mammalian nervous system. The neurotransmitter acetylcholine is secreted by neurons in many areas of the brain, but specifically by the large pyramidal cells of the motor cortex, by several different neurons in the basal ganglia, by the motor neurons that innervate the skeletal muscles, by the preganglionic neurons of the autonomic nervous system (both sympathetic and parasympathetic), by the postganglionic neurons of the parasympathetic nervous system, and by some of the postganglionic neurons of the sympathetic nervous system. Essentially, only the postganglionic sympathetic nerve fibers to the sweat glands, the piloerector muscles and a few blood vessels are cholinergic and most of the postganglionic neurons of the sympathetic nervous system release the neurotransmitter norepinephrine. In most instances acetylcholine has an excitatory effect. However, acetylcholine is known to have inhibitory effects at some of the peripheral parasympathetic nerve endings, such as inhibition of the heart by the vagal nerve.

Brief Summary Text (27):

The efferent signals of the autonomic nervous system are transmitted to the body through either the sympathetic nervous system or the parasympathetic nervous system. The preganglionic neurons of the sympathetic nervous system extend from preganglionic sympathetic neuron cell bodies located in the intermediolateral horn of the spinal cord. The preganglionic sympathetic nerve fibers, extending from the cell body, synapse with postganglionic neurons located in either a paravertebral sympathetic ganglion or in a prevertebral ganglion. Since, the preganglionic neurons of both the sympathetic and parasympathetic nervous system are cholinergic, application of acetylcholine to the ganglia will excite both sympathetic and parasympathetic postganglionic neurons.

## CLAIMS:

1. A method for treating an injured muscle, the method comprising the step of local administration of a therapeutically effective amount of a botulinum toxin to an injured muscle, thereby treating the injured muscle by promoting healing of the injured muscle within six weeks after the local administration of the botulinum toxin.
2. The method of claim 1, wherein the botulinum toxin is intramuscularly injected.
3. The method of claim 1, wherein the botulinum toxin immobilizes the injured muscle.
4. The method of claim 1, wherein the botulinum toxin is effective to immobilize the injured muscle during phase 1 and phase 2 of a repair process of the injured muscle.
5. The method of claim 1, wherein the botulinum toxin is effective to immobilize the injured muscle during phase 1 of a repair process of the injured muscle.
6. The method of claim 1, wherein the botulinum toxin is selected from the group consisting of botulinum toxin type A, B, C.sub.1, D, E, F, and G.
7. The method of claim 1, wherein the botulinum toxin is a recombinantly made botulinum toxin.
9. The method of claim 1, wherein the botulinum toxin is botulinum toxin type A.
10. The method of claim 1, wherein the botulinum toxin is botulinum toxin type B.
11. A method for treating an injured muscle, the method comprising the step of local administration of a therapeutically effective amount of a botulinum toxin type A to an injured muscle, thereby treating the injured muscle by promoting healing of the injured muscle within six weeks after the local administration of the botulinum toxin type A.

[Previous Doc](#)[Next Doc](#)[Go to Doc#](#)



**Merriam-Webster**  
OnLine

**Merriam-Webster FOR KIDS**

**Merriam-Webster ONLINE**

**Encyclopædia BRITANNICA**

**Merriam-Webster COLLEGiate®**

**Merriam-Webster UN**

**HOME**

**PREMIUM SERVICES** ▾

M-WCollege.com

M-WUnabridged.com

Britannica.com

Multi-User Licenses

**Merriam-Webster Online Dictionary**

One entry found for **intrathecal**.

**Merriam-Webste**

**Dictionary**

**Thesaurus**

**DOWNLOADS**

**WORD OF THE DAY**

**WORD GAMES**

**WORD FOR THE WISE**

**ONLINE STORE**

**HELP**

Main Entry: **in·tra·the·cal** 

Pronunciation: *-'thE-k&l*

Function: *adjective*

: introduced into or occurring in the space under the arachnoid membrane of the brain or spinal cord

- **in·tra·the·cal·ly**  /-k (& -) 1E/ *adverb*



**intrathecal**

**Merriam-Webster Inc.**

Company information

For **More Information on "intrathecal"** go to [Britannica.com](#)

Get the **Top 10 Search Results for "intrathecal"**

[Pronunciation Symbols](#)

**Palm & Pock**

Browse and downl

Merriam-Webster

e-books and game

Palm and Pocket P

and Mobile Phones

**Merriam-Web:**

**Online Store**

**Handheld  
Collegiate**  
Now you can take  
Eleventh Edition w  
anywhere as Franklin  
new Speaking Elec  
Handheld!  
[Franklin.com/](#)

**Merriam-Webster  
Collegiate  
14-day Free**

[Products](#)

[Premium Services](#)

[Company Info](#)

[Contact Us](#)

[Advertising Info](#)

[Privacy P](#)

© 2004 Merriam-Webster, Incorporated

[Home](#)

[Help](#)

[Subjects](#)

[Feedback](#)

[Random](#)

[Search OMD](#)

## Intrathecal

<anatomy> Within a sheath, for example, cerebrospinal fluid that is contained within the dura mater. It also refers to drugs administered into the cerebrospinal fluid bathing the spinal cord and brain.

(30 Sep 1997)

**Previous:** [intrastromal](#), [intrasynovial](#), [intratarsal](#), [intratendinous bursa of elbow](#)

**Next:** [intrathecal chemotherapy](#), [intrathecal injection](#), [intrathoracic](#)

Published at the Dept. of Medical Oncology, [University of Newcastle upon Tyne](#)  
© Copyright 1997-2004 - The CancerWEB Project. All Rights Reserved.

First Hit    Fwd Refs

L5: Entry 7 of 14

File: USPT

Sep 23, 2003

US-PAT-NO: 6623742  
DOCUMENT-IDENTIFIER: US 6623742 B2

TITLE: Methods for treating fibromyalgia

DATE-ISSUED: September 23, 2003

## INVENTOR-INFORMATION:

| NAME            | CITY                | STATE | ZIP CODE | COUNTRY |
|-----------------|---------------------|-------|----------|---------|
| Voet, Martin A. | San Juan Capistrano | CA    |          |         |

US-CL-CURRENT: 424/236.1; 424/247.1, 435/71.3, 514/12, 514/2, 530/344, 530/350

## CLAIMS:

What is claimed is:

1. A method for treating fibromyalgia, the method comprising the step of administering subcutaneously or intramuscularly a therapeutically effective amount of a botulinum toxin to a peripheral location of a body of a patient afflicted with fibromyalgia, wherein the peripheral location is not a locus of pain, and wherein the locus of pain and the site of administration are located within a same dermatome, thereby relieving a fibromyalgia pain for at least one month.
2. The method of claim 1 wherein the peripheral location is in a head of the patient, and wherein the locus of pain is not in the head of the patient.
3. The method of claim 1 wherein the peripheral location is in a head of the patient, and wherein the locus of pain is at a fibromyalgia tender point.
4. The method of claim 1 wherein the peripheral location is in a cranial area or a facial area of the patient, and wherein the locus of pain is at a fibromyalgia tender point.
5. The method of claim 1 wherein the botulinum toxin is selected from the group consisting of botulinum toxin types A, B, C, D, E, F, and G.
6. The method of claim 1 wherein the botulinum toxin is a botulinum toxin type A.
7. The method of claim 1 wherein the location of peripheral administration and the locus of pain have neuronal processes that are projected from the same spinal sensory nerve root.
8. The method of claim 1 wherein the botulinum toxin is administered with a needle.
9. The method of claim 1 wherein the botulinum toxin is administered by

needleless injection.

10. A method for treating fibromyalgia pain, the method comprising the step of administering subcutaneously or intramuscularly a therapeutically effective amount of a botulinum toxin to a peripheral location of a body of a patient, wherein the patient has a locus of pain at a fibromyalgia tender point, and wherein the peripheral location is not at the locus of pain, and the locus of pain and the site of administration are located within a same dermatome, thereby relieving the pain for at least one month.

11. The method of claim 10 wherein the patient has at least eleven loci of pain.

12. The method of claim 10 wherein the botulinum toxin is selected from the group consisting of botulinum neurotoxin types A, B, C, D, E, F, and G.

13. The method of claim 10 wherein the botulinum toxin is a botulinum toxin type A.

14. The method of claim 10 wherein the location of peripheral administration and the locus of pain have neuronal processes that are projected from the same spinal sensory nerve root.

15. The method of claim 10 wherein the botulinum toxin is administered with a needle.

16. The method of claim 10 wherein the botulinum toxin is administered by needleless injection.

17. A method for treating fibromyalgia, the method comprising the step of administering subcutaneously or intramuscularly a therapeutically effective amount of a botulinum toxin to a dermatome of a patient afflicted with fibromyalgia, wherein the dermatome encompasses 50% or more of a locus of pain, wherein the administration is not at the locus of pain, thereby relieving a fibromyalgia pain for at least one month.

18. The method of claim 17 wherein the botulinum toxin is selected from the group consisting of botulinum toxin types A, B, C, D, E, F, and G.

19. The method of claim 17 wherein the botulinum toxin is a botulinum toxin type A.

20. The method of claim 17 wherein the location of administration and the locus of pain have neuronal processes that are projected from the same spinal sensory nerve root.

21. The method of claim 17 wherein the botulinum toxin is administered with a needle.

22. The method of claim 17 wherein the botulinum toxin is administered by needleless injection.

23. A method for treating fibromyalgia pain, the method comprising the step of administering subcutaneously or intramuscularly a therapeutically effective amount of a botulinum toxin to a dermatome of a patient, wherein the patient has a locus of pain at a fibromyalgia tender point, wherein the dermatome

encompasses 50% or more of the locus of pain, and wherein the administration is not at the locus of pain, thereby relieving the pain for at least one month.

24. The method of claim 23 wherein the patient has at least eleven loci of pain.

25. The method of claim 23 wherein the locus of pain and the peripheral location are located within a dermatome.

26. The method of claim 23 wherein the botulinum toxin is selected from the group consisting of botulinum neurotoxin types A, B, C, D, E, F, and G.

27. The method of claim 23 wherein the botulinum toxin is a botulinum toxin type A.

28. The method of claim 23 wherein the location of administration and the locus of pain have neuronal processes that are projected from the same spinal sensory nerve root.

29. The method of claim 23 wherein the botulinum toxin is administered with a needle.

30. The method of claim 23 wherein the botulinum toxin is administered by needleless injection.

31. A method for treating fibromyalgia, the method comprising the step of administering subcutaneously or intramuscularly a therapeutically effective amount of a botulinum toxin type A to a dermatome of a patient afflicted with fibromyalgia, wherein the dermatome encompasses 50% or more of a locus of pain which is at a fibromyalgia tender point, and wherein the local administration is not at the locus of pain, thereby relieving a fibromyalgia pain for at least one month.

32. A method for treating fibromyalgia pain, the method comprising the step of administering subcutaneously or intramuscularly a therapeutically effective amount of a botulinum toxin type A to a dermatome of a patient, wherein the patient has a locus of pain which is at a fibromyalgia tender point, wherein the dermatome encompasses 50% or more of the locus of pain, and wherein the administration is not at the locus of pain, thereby relieving the pain for at least one month.

First Hit    Fwd Refs

L9: Entry 70 of 122

File: USPT

Sep 23, 2003

US-PAT-NO: 6623742  
DOCUMENT-IDENTIFIER: US 6623742 B2

TITLE: Methods for treating fibromyalgia

DATE-ISSUED: September 23, 2003

## INVENTOR-INFORMATION:

| NAME            | CITY                | STATE | ZIP CODE | COUNTRY |
|-----------------|---------------------|-------|----------|---------|
| Voet, Martin A. | San Juan Capistrano | CA    |          |         |

US-CL-CURRENT: 424/236.1; 424/247.1, 435/71.3, 514/12, 514/2, 530/344, 530/350

## CLAIMS:

What is claimed is:

1. A method for treating fibromyalgia, the method comprising the step of administering subcutaneously or intramuscularly a therapeutically effective amount of a botulinum toxin to a peripheral location of a body of a patient afflicted with fibromyalgia, wherein the peripheral location is not a locus of pain, and wherein the locus of pain and the site of administration are located within a same dermatome, thereby relieving a fibromyalgia pain for at least one month.
2. The method of claim 1 wherein the peripheral location is in a head of the patient, and wherein the locus of pain is not in the head of the patient.
3. The method of claim 1 wherein the peripheral location is in a head of the patient, and wherein the locus of pain is at a fibromyalgia tender point.
4. The method of claim 1 wherein the peripheral location is in a cranial area or a facial area of the patient, and wherein the locus of pain is at a fibromyalgia tender point.
5. The method of claim 1 wherein the botulinum toxin is selected from the group consisting of botulinum toxin types A, B, C, D, E, F, and G.
6. The method of claim 1 wherein the botulinum toxin is a botulinum toxin type A.
7. The method of claim 1 wherein the location of peripheral administration and the locus of pain have neuronal processes that are projected from the same spinal sensory nerve root.
8. The method of claim 1 wherein the botulinum toxin is administered with a needle.
9. The method of claim 1 wherein the botulinum toxin is administered by

needleless injection.

10. A method for treating fibromyalgia pain, the method comprising the step of administering subcutaneously or intramuscularly a therapeutically effective amount of a botulinum toxin to a peripheral location of a body of a patient, wherein the patient has a locus of pain at a fibromyalgia tender point, and wherein the peripheral location is not at the locus of pain, and the locus of pain and the site of administration are located within a same dermatome, thereby relieving the pain for at least one month.

11. The method of claim 10 wherein the patient has at least eleven loci of pain.

12. The method of claim 10 wherein the botulinum toxin is selected from the group consisting of botulinum neurotoxin types A, B, C, D, E, F, and G.

13. The method of claim 10 wherein the botulinum toxin is a botulinum toxin type A.

14. The method of claim 10 wherein the location of peripheral administration and the locus of pain have neuronal processes that are projected from the same spinal sensory nerve root.

15. The method of claim 10 wherein the botulinum toxin is administered with a needle.

16. The method of claim 10 wherein the botulinum toxin is administered by needleless injection.

17. A method for treating fibromyalgia, the method comprising the step of administering subcutaneously or intramuscularly a therapeutically effective amount of a botulinum toxin to a dermatome of a patient afflicted with fibromyalgia, wherein the dermatome encompasses 50% or more of a locus of pain, wherein the administration is not at the locus of pain, thereby relieving a fibromyalgia pain for at least one month.

18. The method of claim 17 wherein the botulinum toxin is selected from the group consisting of botulinum toxin types A, B, C, D, E, F, and G.

19. The method of claim 17 wherein the botulinum toxin is a botulinum toxin type A.

20. The method of claim 17 wherein the location of administration and the locus of pain have neuronal processes that are projected from the same spinal sensory nerve root.

21. The method of claim 17 wherein the botulinum toxin is administered with a needle.

22. The method of claim 17 wherein the botulinum toxin is administered by needleless injection.

23. A method for treating fibromyalgia pain, the method comprising the step of administering subcutaneously or intramuscularly a therapeutically effective amount of a botulinum toxin to a dermatome of a patient, wherein the patient has a locus of pain at a fibromyalgia tender point, wherein the dermatome

encompasses 50% or more of the locus of pain, and wherein the administration is not at the locus of pain, thereby relieving the pain for at least one month.

24. The method of claim 23 wherein the patient has at least eleven loci of pain.

25. The method of claim 23 wherein the locus of pain and the peripheral location are located within a dermatome.

26. The method of claim 23 wherein the botulinum toxin is selected from the group consisting of botulinum neurotoxin types A, B, C, D, E, F, and G.

27. The method of claim 23 wherein the botulinum toxin is a botulinum toxin type A.

28. The method of claim 23 wherein the location of administration and the locus of pain have neuronal processes that are projected from the same spinal sensory nerve root.

29. The method of claim 23 wherein the botulinum toxin is administered with a needle.

30. The method of claim 23 wherein the botulinum toxin is administered by needleless injection.

31. A method for treating fibromyalgia, the method comprising the step of administering subcutaneously or intramuscularly a therapeutically effective amount of a botulinum toxin type A to a dermatome of a patient afflicted with fibromyalgia, wherein the dermatome encompasses 50% or more of a locus of pain which is at a fibromyalgia tender point, and wherein the local administration is not at the locus of pain, thereby relieving a fibromyalgia pain for at least one month.

32. A method for treating fibromyalgia pain, the method comprising the step of administering subcutaneously or intramuscularly a therapeutically effective amount of a botulinum toxin type A to a dermatome of a patient, wherein the patient has a locus of pain which is at a fibromyalgia tender point, wherein the dermatome encompasses 50% or more of the locus of pain, and wherein the administration is not at the locus of pain, thereby relieving the pain for at least one month.

[First Hit](#)[Previous Doc](#)[Next Doc](#)[Go to Doc#](#) [Generate Collection](#) [Print](#)

L5: Entry 1 of 14

File: PGPB

Apr 1, 2004

PGPUB-DOCUMENT-NUMBER: 20040062776  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20040062776 A1

TITLE: Botulinum toxin therapy for fibromyalgia

PUBLICATION-DATE: April 1, 2004

INVENTOR-INFORMATION:

| NAME            | CITY                | STATE | COUNTRY | RULE-47 |
|-----------------|---------------------|-------|---------|---------|
| Voet, Martin A. | San Juan Capistrano | CA    | US      |         |

US-CL-CURRENT: 424/239.1

CLAIMS:

I claim:

1. A method for treating fibromyalgia, the method comprising the step of administering a botulinum toxin to a patient afflicted with fibromyalgia.
2. The method of claim 1 wherein the botulinum toxin is selected from the group consisting of botulinum toxin types A, B, C, D, E, F and G.
3. The method of claim 1 wherein the botulinum toxin is a botulinum neurotoxin type A.
4. The method of claim 1 wherein the botulinum toxin is administered subcutaneously.
5. The method of claim 1 wherein the botulinum toxin is administered intramuscularly.
6. A method for treating a fibromyalgia pain, the method comprising the step of administering locally a therapeutically effective amount of a botulinum neurotoxin to a patient with a fibromyalgia pain, thereby treating the fibromyalgia pain.
7. The method of claim 6 wherein the botulinum neurotoxin is selected from the group consisting of botulinum neurotoxin types A, B, C, D, E, F and G.
8. The method of claim 6 wherein the botulinum neurotoxin is a botulinum neurotoxin type A.
9. The method of claim 6 wherein the botulinum neurotoxin is administered subcutaneously or intramuscularly.

10. A method for treating fibromyalgia, the method comprising the step of administering a botulinum toxin to a patient with fibromyalgia, the botulinum toxin administering being carried out at a first location which first location is anatomically distinct from and/or anatomically distant from a second location, at which second location the patient has a fibromyalgia pain which is alleviated by the administration of the botulinum toxin at the first location, thereby treating fibromyalgia.

11. The method of claim 10, wherein the first location is a peripheral location.

12. The method of claim 10, wherein the second location is a locus of pain.

13. The method of claim 10, wherein the administering step is carried out by subcutaneous or intramuscular administering of the botulinum toxin.

14. The method of claim 10, wherein the first location is the head or neck of the patient.

[Previous Doc](#)

[Next Doc](#)

[Go to Doc#](#)

[First Hit](#)[Previous Doc](#)[Next Doc](#)[Go to Doc#](#) [Generate Collection](#) 

L5: Entry 2 of 14

File: PGPB

Jan 29, 2004

PGPUB-DOCUMENT-NUMBER: 20040018213  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20040018213 A1

TITLE: Pain treatment by peripheral administration of a neurotoxin

PUBLICATION-DATE: January 29, 2004

INVENTOR-INFORMATION:

| NAME                | CITY          | STATE | COUNTRY | RULE-47 |
|---------------------|---------------|-------|---------|---------|
| Aoki, Kei Roger     | Coto de Caza  | CA    | US      |         |
| Cui, Minglei        | Irvine        | CA    | US      |         |
| Jenkins, Stephen W. | Mission Viejo | CA    | US      |         |

US-CL-CURRENT: 424/239.1

CLAIMS:

We claim:

1. A method for treating pain, the method comprising the step of peripheral administration of a neurotoxin to a mammal, wherein the pain treated is not associated with a muscle spasm.
2. The method of claim 1, wherein the neurotoxin comprises a neuronal binding moiety which is substantially native to the neurotoxin.
3. The method of claim 1, wherein the neurotoxin is a botulinum toxin.
4. The method of claim 1, wherein the neurotoxin is a botulinum toxin elected from the group consisting of botulinum toxin types A, B, C.sub.1, D, E, F and G.
5. The method of claim 1, wherein the neurotoxin is botulinum toxin type A.
6. The method of claim 1, wherein the neurotoxin is a modified neurotoxin having at least one amino acid deleted, modified or replaced.
7. The method of claim 1, wherein the neurotoxin is made at least in part by recombinant process.
8. The method of claim 1, wherein the neurotoxin is administered in an amount between about 0.01 U/kg and about 35 U/kg.
9. The method of claim 1, wherein the pain is substantially alleviated for between about 1 month and about 6 months.

10. The method of claim 1, wherein the peripheral administration step is carried out out prior to an onset of a nociceptive event or syndrome experienced by the mammal.
11. The method of claim 1, wherein the peripheral administration is carried out subsequent to an onset of a nociceptive event experienced by the mammal.
12. A method for alleviating pain, the method comprising the step of peripheral administration of a botulinum toxin to a human patient, thereby alleviating pain, wherein the pain is not associated with a muscle disorder.
13. The method of claim 12, wherein the neurotoxin is a botulinum toxin selected from the group consisting of botulinum toxin types A, B, C.sub.1, D, E, F and G.
14. A method for treating a pain, the method comprising the step of peripheral administration of a neurotoxin to a mammal, wherein the neurotoxin is a polypeptide comprising: a) a first amino acid sequence region comprising a wild type neuronal binding moiety, substantially completely derived from a neurotoxin selected from a group consisting botulinum toxin types A, B, C.sub.1, D, E, F, G and mixtures thereof; b) a second amino acid sequence region effective to translocate the polypeptide or a part thereof across an endosome membrane; and c) a third amino acid sequence region having therapeutic activity when released into a cytoplasm of a target cell, wherein the pain is not associated with a muscle spasm.
15. The method of claim 14, wherein the first amino acid sequence region of the polypeptide comprises a carboxyl terminal of a heavy chain derived from the neurotoxin.
16. The method of claim 14, wherein the neurotoxin is botulinum toxin type A.
17. The method of claim 14, wherein the second amino acid sequence region of the polypeptide comprises an amine terminal of a heavy chain derived from a neurotoxin selected from a group consisting of botulinum toxin types A, B, C.sub.1, D, E, F, G and mixtures thereof.
18. The method of claim 14, wherein the second amino acid sequence region of the polypeptide comprises an amine terminal of a toxin heavy chain derived from botulinum toxin type A.
19. The method of claim 14, wherein the third amino acid sequence region of the polypeptide comprises a toxin light chain derived from a neurotoxin selected from a group consisting of beratti toxin; butyricum toxin; tetani toxin; botulinum toxin types A, B, C.sub.1, D, E, F, G and mixtures thereof.
20. The method of claim 14, wherein the third amino acid sequence region of the polypeptide comprises a toxin light chain derived from botulinum toxin type A.
21. A method for improving patient function, the method comprising the step of peripheral administration of a botulinum toxin to a patient experiencing a non-muscle disorder related pain, thereby improving patient function as determined by improvement in one or more of the factors of reduced pain, reduced time spent in bed, improve hearing, increased ambulation, healthier attitude and a more varied lifestyle.
22. A method for treating post-operative pain, the method comprising the step of peripheral administration of an effective amount of a botulinum toxin before, during during or immediately after a surgical procedure, thereby alleviating a post-operative pain, wherein the surgical procedure is not carried out to treat a muscle

spasm.

23 A method for treating a visceral pain the method comprising the step of non-systemic, local administration of an effective amount of a botulinum toxin, thereby alleviating a visceral pain.

24. A method for treating pain, the method comprising the step of peripheral administration of a neurotoxin to a mammal, wherein the pain is not substantially due to a muscle spasm.

25. The method of claim 24, wherein, the neurotoxin is a botulinum toxin.

26. The method of claim 24, wherein the pain is not secondary to a muscle spasm.

27. The method of claim 24, wherein the peripheral administration is by subcutaneous administration of the neurotoxin.

[Previous Doc](#)

[Next Doc](#)

[Go to Doc#](#)

[First Hit](#)[Previous Doc](#)[Next Doc](#)[Go to Doc#](#) [Generate Collection](#) [Print](#)

L5: Entry 3 of 14

File: PGPB

Jan 29, 2004

PGPUB-DOCUMENT-NUMBER: 20040018212  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20040018212 A1

TITLE: Joint pain treatment by peripheral administration of a neurotoxin

PUBLICATION-DATE: January 29, 2004

INVENTOR-INFORMATION:

| NAME                | CITY          | STATE | COUNTRY | RULE-47 |
|---------------------|---------------|-------|---------|---------|
| Aoki, Kei Roger     | Coto de Caza  | CA    | US      |         |
| Cui, Minglei        | Irvine        | CA    | US      |         |
| Jenkins, Stephen W. | Mission Viejo | CA    | US      |         |

US-CL-CURRENT: 424/239.1

CLAIMS:

We claim:

1. A method for treating pain, the method comprising the step of peripheral administration of a neurotoxin to a mammal, wherein the pain treated is not associated with a muscle spasm.
2. The method of claim 1, wherein the neurotoxin comprises a neuronal binding moiety which is substantially native to the neurotoxin.
3. The method of claim 1, wherein the neurotoxin is a botulinum toxin.
4. The method of claim 1, wherein the neurotoxin is a botulinum toxin elected from the group consisting of botulinum toxin types A, B, C sub.1, D, E, F and G.
5. The method of claim 1, wherein the neurotoxin is botulinum toxin type A.
6. The method of claim 1, wherein the neurotoxin is a modified neurotoxin having at least one amino acid deleted, modified or replaced.
7. The method of claim 1, wherein the neurotoxin is made at least in part by a recombinant process.
8. The method of claim 1, wherein the neurotoxin is administered in an amount between about 0.01 U/kg and about 35 U/kg.
9. The method of claim 1, wherein the pain is substantially alleviated for between about 1 month and about 6 months.

10. The method of claim 1, wherein the peripheral administration step is carried out out prior to an onset of a nociceptive event or syndrome experienced by the mammal.
11. The method of claim 1, wherein the peripheral administration is carried out subsequent to an onset of a nociceptive event experienced by the mammal.
12. A method for alleviating pain, the method comprising the step of peripheral administration of a botulinum toxin to a human patient, thereby alleviating pain, wherein the pain is not associated with a muscle disorder.
13. The method of claim 12, wherein the neurotoxin is a botulinum toxin selected from the group consisting of botulinum toxin types A, B, C.sub.1, D, E, F and G.
14. A method for treating a pain, the method comprising the step of periph ral administration of a neurotoxin to a mammal, wherein the neurotoxin is a polypeptide comprising: a) a first amino acid sequence region comprising a wild type neuronal binding moiety, substantially completely derived from a neurotoxin selected from a group consisting botulinum toxin types A, B, C.sub.1, D, E, F, G and mixtures thereof; b) a second amino acid sequence region effective to translocate th polypeptide or a part thereof across an endosome membrane; and c) a third amino acid sequence region having therapeutic activity when released into a cytoplasm of a target cell, wherein the pain is not associated with a muscle spasm.
15. The method of claim 14, wherein the first amino acid sequence region of the polypeptide comprises a carboxyl terminal of a heavy chain derived from the neurotoxin.
16. The method of claim 14, wherein the neurotoxin is botulinum toxin type A.
17. The method of claim 14, wherein the second amino acid sequence region of the polypeptide comprises an amine terminal of a heavy chain derived from a neurotoxin selected from a group consisting of botulinum toxin types A, B, C.sub.1, D, E, F, G and mixtures thereof.
18. The method of claim 14, wherein the second amino acid sequence region of the polypeptide comprises an amine terminal of a toxin heavy chain derived from botulinum toxin type A.
19. The method of claim 14, wherein the third amino acid sequence region of the polypeptide comprises a toxin light chain derived from a neurotoxin selected from a group consisting of beratti toxin; butyricum toxin; tetani toxin; botulinum toxin types A, B, C.sub.1, D, E, F, G and mixtures thereof.
20. The method of claim 14, wherein the third amino acid sequence region of the polypeptide comprises a toxin light chain derived from botulinum toxin type A.
21. A method for improving patient function, the method comprising the step of peripheral administration of a botulinum toxin to a patient experiencing a non-muscle disorder related pain, thereby improving patient function as determined by improvement in one or more of the factors of reduced pain, reduced time spent in bed, improve hearing, increased ambulation, healthier attitude and a more varied lifestyle.
22. A method for treating post-operative pain, the method comprising the st p of peripheral administration of an effective amount of a botulinum toxin before, during during or immediately after a surgical procedure, thereby alleviating a post-operative pain, wherein the surgical procedure is not carried out to treat a muscle

spasm.

23. A method for treating a visceral pain the method comprising the step of non-systemic, local administration of an effective amount of a botulinum toxin, thereby alleviating a visceral pain.

24. A method for treating pain, the method comprising the step of peripheral administration of a neurotoxin to a mammal, wherein the pain is not substantially due to a muscle spasm.

25. The method of claim 24, wherein, the neurotoxin is a botulinum toxin.

26. The method of claim 24, wherein the pain is not secondary to a muscle spasm.

27. The method of claim 24, wherein the peripheral administration is by subcutaneous administration of the neurotoxin.

[Previous Doc](#)

[Next Doc](#)

[Go to Doc#](#)

## WEST Search History

[Hide Items](#) [Restore](#) [Clear](#) [Cancel](#)

DATE: Tuesday, July 06, 2004

| <u>Hide?</u>   | <u>Set Name</u> | <u>Query</u>  | <u>Hit Count</u> |
|--|-----------------|---|------------------|
| <i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=AND</i> |                 |   |                  |
| <input type="checkbox"/>                                       | L1              | schizophren\$   | 15305            |
| <input type="checkbox"/>                                       | L2              | L1 and (donovan.in. or allergan.asn.)   | 3                |
| <input type="checkbox"/>                                       | L3              | (donovan.in. or allergan.asn.)  | 5142             |
| <input type="checkbox"/>                                       | L4              | L3 and peripheral.ti,ab,clm.  | 135              |
| <input type="checkbox"/>                                       | L5              | L4 and (botulinum or botulism or botox or neurotoxin or neuro-toxin or toxin or clostrid\$) | 14               |

END OF SEARCH HISTORY

**Search Results - Record(s) 1 through 14 of 14 returned.**

---

1. 20040062776. 18 Sep 03. 01 Apr 04. Botulinum toxin therapy for fibromyalgia. Voet, Martin A.. 424/239.1; A61K039/08.

---

2. 20040018213. 29 Jul 03. 29 Jan 04. Pain treatment by peripheral administration of a neurotoxin. Aoki, Kei Roger, et al. 424/239.1; A61K039/08.

---

3. 20040018212. 29 Jul 03. 29 Jan 04. Joint pain treatment by peripheral administration of a neurotoxin. Aoki, Kei Roger, et al. 424/239.1; A61K039/08.

---

4. 20030054975. 17 Sep 01. 20 Mar 03. Methods for treating fibromyalgia. Voet, Martin A.. 514/2; A61K038/16.

---

5. 20020176872. 18 Jul 02. 28 Nov 02. Pain treatment by peripheral administration of a neurotoxin. Aoki, Kei Roger, et al. 424/247.1; A61K039/08.

---

6. 20020028216. 04 Oct 01. 07 Mar 02. Botulinum toxin implant. Donovan, Stephen. 424/236.1; A61K039/02.

---

7. 6623742. 17 Sep 01; 23 Sep 03. Methods for treating fibromyalgia. Voet; Martin A.. 424/236.1; 424/247.1 435/71.3 514/12 514/2 530/344 530/350. A61K039/08 C07K014/33.

---

8. 6506399. 04 Oct 01; 14 Jan 03. Biodegradable botulinum toxin implant. Donovan; Stephen. 424/423; 424/184.1 424/236.1 424/422 424/426. A61K039/02 A61K039/00.

---

9. 6312708. 21 Jul 00; 06 Nov 01. Botulinum toxin implant. Donovan; Stephen. 424/423; 424/184.1 424/236.1 424/422 424/426. A61K039/02 A61K039/00.

---

10. WO2003099289A. Alleviation of pain e.g. neuropathic pain, visceral pain, post-operative pain, inflammatory pain, arthritic pain involves use of a composition comprising alpha-adrenergic agonist and a composition comprising selective alpha-2A antagonist. DONELLO, J E, et al. A61K031/137 A61K031/4164 A61K031/4166 A61K031/4168 A61K031/4178 A61K031/498 A61K031/538 A61P029/00.

---

11. US20030054975A. Treatment of pain associated with fibromyalgia involves locally administering Clostridial neurotoxin to peripheral location of patient's body afflicted with fibromyalgia, where the location is not locus of pain. VOET, M A. A61K038/16 A61K039/08 C07K014/33.

---

12. US20030027752A. Novel modified neurotoxin with a structural modification that alters biological persistence or activity of the modified neurotoxin relative to the unmodified neurotoxin, for treating tremors, bruxism and dysphagia. AOKI, K R, et al. A61K038/17 C07K014/435.

---

13. WO 200208268A. Novel modified neurotoxin comprising structural modification which alters the biological persistence and/or biological activity of a neurotoxin, useful for treating neuromuscular or autonomic disorder, or pain. AOKI, K R, et al. A61K038/16 A61P021/00 A61P029/02 A61P037/00 C07K014/33.

---

14. US 6464986B. Treating a non-spasm caused pain involves peripheral administration of a neurotoxin to mammal. AOKI, K R, et al. A61K038/00 A61K038/16 A61K038/48 A61K039/02 A61K039/08 A61K045/00 A61P025/02 A61P029/02.

[Generate Collection](#)[Print](#)

| Terms   | Documents |
|---|-----------|
| L4 and (botulinum or botulism or botox or neurotoxin or neuro-toxin or toxin or clostrid\$) | 14        |

[Prev Page](#)[Next Page](#)[Go to Doc#](#)

First Hit

L5: Entry 1 of 14

File: PGPB

Apr 1, 2004

PGPUB-DOCUMENT-NUMBER: 20040062776  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20040062776 A1

TITLE: Botulinum toxin therapy for fibromyalgia

PUBLICATION-DATE: April 1, 2004

## INVENTOR- INFORMATION:

| NAME            | CITY                | STATE | COUNTRY | RULE-47 |
|-----------------|---------------------|-------|---------|---------|
| Voet, Martin A. | San Juan Capistrano | CA    | US      |         |

## ASSIGNEE- INFORMATION:

| NAME           | CITY | STATE | COUNTRY | TYPE CODE |
|----------------|------|-------|---------|-----------|
| Allergan, Inc. |      |       |         | 02        |

APPL-NO: 10/ 666408 [PALM]  
DATE FILED: September 18, 2003

## RELATED-US-APPL-DATA:

Application 10/666408 is a continuation-in-part-of US application 09/954610, filed September 17, 2001, US Patent No. 6623742

INT-CL: [07] A61 K 39/08

US-CL-PUBLISHED: 424/239.1  
US-CL-CURRENT: 424/239.1

REPRESENTATIVE-FIGURES: NONE

## ABSTRACT:

Methods for treating fibromyalgia by administering a therapeutically effective amount of a botulinum toxin to a patient with fibromyalgia.

## CROSS REFERENCE

[0001] This application is a continuation in part of U.S. patent application Ser. No. 09/954,610, filed Sep. 17, 2001.

First Hit

L5: Entry 1 of 14

File: PGPB

Apr 1, 2004

PGPUB-DOCUMENT-NUMBER: 20040062776

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040062776 A1

TITLE: Botulinum toxin therapy for fibromyalgia

PUBLICATION-DATE: April 1, 2004

## INVENTOR-INFORMATION:

| NAME            | CITY                | STATE | COUNTRY | RULE-47 |
|-----------------|---------------------|-------|---------|---------|
| Voet, Martin A. | San Juan Capistrano | CA    | US      |         |

US-CL-CURRENT: 424/239.1

## CLAIMS:

I claim:

1. A method for treating fibromyalgia, the method comprising the step of administering a botulinum toxin to a patient afflicted with fibromyalgia.
2. The method of claim 1 wherein the botulinum toxin is selected from the group consisting of botulinum toxin types A, B, C, D, E, F and G.
3. The method of claim 1 wherein the botulinum toxin is a botulinum neurotoxin type A.
4. The method of claim 1 wherein the botulinum toxin is administered subcutaneously.
5. The method of claim 1 wherein the botulinum toxin is administered intramuscularly.
6. A method for treating a fibromyalgia pain, the method comprising the step of administering locally a therapeutically effective amount of a botulinum neurotoxin to a patient with a fibromyalgia pain, thereby treating the fibromyalgia pain.
7. The method of claim 6 wherein the botulinum neurotoxin is selected from the group consisting of botulinum neurotoxin types A, B, C, D, E, F and G.
8. The method of claim 6 wherein the botulinum neurotoxin is a botulinum neurotoxin type A.
9. The method of claim 6 wherein the botulinum neurotoxin is administered subcutaneously or intramuscularly.
10. A method for treating fibromyalgia, the method comprising the step of administering a botulinum toxin to a patient with fibromyalgia, the botulinum toxin

administering being carried out at a first location which first location is anatomically distinct from and/or anatomically distant from a second location, at which second location the patient has a fibromyalgia pain which is alleviated by the administration of the botulinum toxin at the first location, thereby treating fibromyalgia.

11. The method of claim 10, wherein the first location is a peripheral location.
12. The method of claim 10, wherein the second location is a locus of pain.
13. The method of claim 10, wherein the administering step is carried out by subcutaneous or intramuscular administering of the botulinum toxin.
14. The method of claim 10, wherein the first location is the head or neck of the patient.

## Hit List

|               |                     |       |          |           |
|---------------|---------------------|-------|----------|-----------|
| Clear         | Generate Collection | Print | Fwd Refs | Bkwd Refs |
| Generate OACS |                     |       |          |           |

Search Results - Record(s) 1 through 3 of 3 returned.

1. Document ID: US 20030211121 A1

Using default format because multiple data bases are involved.

L2: Entry 1 of 3

File: PGPB

Nov 13, 2003

PGPUB-DOCUMENT-NUMBER: 20030211121

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030211121 A1

TITLE: Therapeutic treatments for neuropsychiatric disorders

PUBLICATION-DATE: November 13, 2003

INVENTOR-INFORMATION:

|                         |                  |       |         |         |
|-------------------------|------------------|-------|---------|---------|
| NAME                    | CITY             | STATE | COUNTRY | RULE-47 |
| <u>Donovan, Stephen</u> | Capistrano Beach | CA    | US      |         |

US-CL-CURRENT: 424/247.1

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KMC](#) | [Drawn D](#)

2. Document ID: US 6306403 B1

L2: Entry 2 of 3

File: USPT

Oct 23, 2001

DOCUMENT-IDENTIFIER: US 6306403 B1

TITLE: Method for treating parkinson's disease with a botulinum toxin

INVENTOR (1):

Donovan; Stephen

Assignee Name (1):

Allergan Sales, Inc.

Other Reference Publication (21):

Hoffman, Ralph E., et al., Transcranial magnetic stimulation and auditory hallucinations in schizophrenia; The Lancet vol. 355, Mar. 25, 2000, 1073-1075.

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KMC](#) | [Drawn D](#)

## 3. Document ID: WO 2003094955 A1, US 20030211121 A1

L2: Entry 3 of 3

File: DWPI

Nov 20, 2003

DERWENT-ACC-NO: 2003-901566

DERWENT-WEEK: 200403

COPYRIGHT 2004 DERWENT INFORMATION LTD

TITLE: Treating a neuropsychiatric disorder, e.g. schizophrenia, Alzheimer's disease, mania or anxiety, comprises administering intracranially a clostridial neurotoxin or a botulinum toxin to a patientINVENTOR: DONOVAN, S

PRIORITY-DATA: 2002US-0143078 (May 10, 2002)

## PATENT-FAMILY:

| PUB-NO            | PUB-DATE          | LANGUAGE | PAGES | MAIN-IPC   |
|-------------------|-------------------|----------|-------|------------|
| WO 2003094955 A1  | November 20, 2003 | E        | 000   | A61K038/48 |
| US 20030211121 A1 | November 13, 2003 |          | 015   | A61K039/08 |

INT-CL (IPC): A61 K 38/48; A61 K 39/08; A61 P 25/18; A61 P 25/22; A61 P 25/28[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Searches](#) | [Databases](#) | [Claims](#) | [KWMC](#) | [Drawn D](#)[Clear](#)[Generate Collection](#)[Print](#)[Fwd Refs](#)[Bkwd Refs](#)[Generate OACCS](#)

| Terms                                 | Documents |
|---------------------------------------|-----------|
| L1 and (donovan.in. or allergan.asn.) | 3         |

Display Format:  [Change Format](#)[Previous Page](#)[Next Page](#)[Go to Doc#](#)

First Hit

L5: Entry 2 of 14

File: PGPB

Jan 29, 2004

PGPUB-DOCUMENT-NUMBER: 20040018213  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20040018213 A1

TITLE: Pain treatment by peripheral administration of a neurotoxin

PUBLICATION-DATE: January 29, 2004

INVENTOR-INFORMATION:

| NAME                | CITY          | STATE | COUNTRY | RULE-47 |
|---------------------|---------------|-------|---------|---------|
| Aoki, Kei Roger     | Coto de Caza  | CA    | US      |         |
| Cui, Minglei        | Irvine        | CA    | US      |         |
| Jenkins, Stephen W. | Mission Viejo | CA    | US      |         |

US-CL-CURRENT: 424/239.1

CLAIMS:

We claim:

1. A method for treating pain, the method comprising the step of peripheral administration of a neurotoxin to a mammal, wherein the pain treated is not associated with a muscle spasm.
2. The method of claim 1, wherein the neurotoxin comprises a neuronal binding moiety which is substantially native to the neurotoxin.
3. The method of claim 1, wherein the neurotoxin is a botulinum toxin.
4. The method of claim 1, wherein the neurotoxin is a botulinum toxin elected from the group consisting of botulinum toxin types A, B, C.sub.1, D, E, F and G.
5. The method of claim 1, wherein the neurotoxin is botulinum toxin type A.
6. The method of claim 1, wherein the neurotoxin is a modified neurotoxin having at least one amino acid deleted, modified or replaced.
7. The method of claim 1, wherein the neurotoxin is made at least in part by recombinant process.
8. The method of claim 1, wherein the neurotoxin is administered in an amount between about 0.01 U/kg and about 35 U/kg.
9. The method of claim 1, wherein the pain is substantially alleviated for between about 1 month and about 6 months.
10. The method of claim 1, wherein the peripheral administration step is carried out prior to an onset of a nociceptive event or syndrome experienced by the mammal.

11. The method of claim 1, wherein the peripheral administration is carried out subsequent to an onset of a nociceptive event experienced by the mammal.
12. A method for alleviating pain, the method comprising the step of peripheral administration of a botulinum toxin to a human patient, thereby alleviating pain, wherein the pain is not associated with a muscle disorder.
13. The method of claim 12, wherein the neurotoxin is a botulinum toxin selected from the group consisting of botulinum toxin types A, B, C.sub.1, D, E, F and G.
14. A method for treating a pain, the method comprising the step of peripheral administration of a neurotoxin to a mammal, wherein the neurotoxin is a polypeptide comprising: a) a first amino acid sequence region comprising a wild type neuronal binding moiety, substantially completely derived from a neurotoxin selected from a group consisting botulinum toxin types A, B, C.sub.1, D, E, F, G and mixtures thereof; b) a second amino acid sequence region effective to translocate the polypeptide or a part thereof across an endosome membrane; and c) a third amino acid sequence region having therapeutic activity when released into a cytoplasm of a target cell, wherein the pain is not associated with a muscle spasm.
15. The method of claim 14, wherein the first amino acid sequence region of the polypeptide comprises a carboxyl terminal of a heavy chain derived from the neurotoxin.
16. The method of claim 14, wherein the neurotoxin is botulinum toxin type A.
17. The method of claim 14, wherein the second amino acid sequence region of the polypeptide comprises an amine terminal of a heavy chain derived from a neurotoxin selected from a group consisting of botulinum toxin types A, B, C.sub.1, D, E, F, G and mixtures thereof.
18. The method of claim 14, wherein the second amino acid sequence region of the polypeptide comprises an amine terminal of a toxin heavy chain derived from botulinum toxin type A.
19. The method of claim 14, wherein the third amino acid sequence region of the polypeptide comprises a toxin light chain derived from a neurotoxin selected from a group consisting of beratti toxin; butyricum toxin; tetani toxin; botulinum toxin types A, B, C.sub.1, D, E, F, G and mixtures thereof.
20. The method of claim 14, wherein the third amino acid sequence region of the polypeptide comprises a toxin light chain derived from botulinum toxin type A.
21. A method for improving patient function, the method comprising the step of peripheral administration of a botulinum toxin to a patient experiencing a non-muscle disorder related pain, thereby improving patient function as determined by improvement in one or more of the factors of reduced pain, reduced time spent in bed, improve hearing, increased ambulation, healthier attitude and a more varied lifestyle.
22. A method for treating post-operative pain, the method comprising the step of peripheral administration of an effective amount of a botulinum toxin before, during during or immediately after a surgical procedure, thereby alleviating a post-operative pain, wherein the surgical procedure is not carried out to treat a muscle spasm.
23. A method for treating a visceral pain the method comprising the step of non-

systemic, local administration of an effective amount of a botulinum toxin, thereby alleviating a visceral pain.

24. A method for treating pain, the method comprising the step of peripheral administration of a neurotoxin to a mammal, wherein the pain is not substantially due to a muscle spasm.

25. The method of claim 24, wherein, the neurotoxin is a botulinum toxin.

26. The method of claim 24, wherein the pain is not secondary to a muscle spasm.

27. The method of claim 24, wherein the peripheral administration is by subcutaneous administration of the neurotoxin.

First Hit

L5: Entry 3 of 14

File: PGPB

Jan 29, 2004

PGPUB-DOCUMENT-NUMBER: 20040018212  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20040018212 A1

TITLE: Joint pain treatment by peripheral administration of a neurotoxin

PUBLICATION-DATE: January 29, 2004

INVENTOR-INFORMATION:

| NAME                | CITY          | STATE | COUNTRY | RULE-47 |
|---------------------|---------------|-------|---------|---------|
| Aoki, Kei Roger     | Coto de Caza  | CA    | US      |         |
| Cui, Minglei        | Irvine        | CA    | US      |         |
| Jenkins, Stephen W. | Mission Viejo | CA    | US      |         |

US-CL-CURRENT: 424/239.1

CLAIMS:

We claim:

1. A method for treating pain, the method comprising the step of peripheral administration of a neurotoxin to a mammal, wherein the pain treated is not associated with a muscle spasm.
2. The method of claim 1, wherein the neurotoxin comprises a neuronal binding moiety which is substantially native to the neurotoxin.
3. The method of claim 1, wherein the neurotoxin is a botulinum toxin.
4. The method of claim 1, wherein the neurotoxin is a botulinum toxin elected from the group consisting of botulinum toxin types A, B, C.sub.1, D, E, F and G.
5. The method of claim 1, wherein the neurotoxin is botulinum toxin type A.
6. The method of claim 1, wherein the neurotoxin is a modified neurotoxin having at least one amino acid deleted, modified or replaced.
7. The method of claim 1, wherein the neurotoxin is made at least in part by a recombinant process.
8. The method of claim 1, wherein the neurotoxin is administered in an amount between about 0.01 U/kg and about 35 U/kg.
9. The method of claim 1, wherein the pain is substantially alleviated for between about 1 month and about 6 months.
10. The method of claim 1, wherein the peripheral administration step is carried out prior to an onset of a nociceptive event or syndrome experienced by the mammal.

11. The method of claim 1, wherein the peripheral administration is carried out subsequent to an onset of a nociceptive event experienced by the mammal.
12. A method for alleviating pain, the method comprising the step of peripheral administration of a botulinum toxin to a human patient, thereby alleviating pain, wherein the pain is not associated with a muscle disorder.
13. The method of claim 12, wherein the neurotoxin is a botulinum toxin selected from the group consisting of botulinum toxin types A, B, C.sub.1, D, E, F and G.
14. A method for treating a pain, the method comprising the step of peripheral administration of a neurotoxin to a mammal, wherein the neurotoxin is a polypeptide comprising: a) a first amino acid sequence region comprising a wild type neuronal binding moiety, substantially completely derived from a neurotoxin selected from a group consisting botulinum toxin types A, B, C.sub.1, D, E, F, G and mixtures thereof; b) a second amino acid sequence region effective to translocate the polypeptide or a part thereof across an endosome membrane; and c) a third amino acid sequence region having therapeutic activity when released into a cytoplasm of a target cell, wherein the pain is not associated with a muscle spasm.
15. The method of claim 14, wherein the first amino acid sequence region of the polypeptide comprises a carboxyl terminal of a heavy chain derived from the neurotoxin.
16. The method of claim 14, wherein the neurotoxin is botulinum toxin type A.
17. The method of claim 14, wherein the second amino acid sequence region of the polypeptide comprises an amine terminal of a heavy chain derived from a neurotoxin selected from a group consisting of botulinum toxin types A, B, C.sub.1, D, E, F, G and mixtures thereof.
18. The method of claim 14, wherein the second amino acid sequence region of the polypeptide comprises an amine terminal of a toxin heavy chain derived from botulinum toxin type A.
19. The method of claim 14, wherein the third amino acid sequence region of the polypeptide comprises a toxin light chain derived from a neurotoxin selected from a group consisting of beratti toxin; butyricum toxin; tetani toxin; botulinum toxin types A, B, C.sub.1, D, E, F, G and mixtures thereof.
20. The method of claim 14, wherein the third amino acid sequence region of the polypeptide comprises a toxin light chain derived from botulinum toxin type A.
21. A method for improving patient function, the method comprising the step of peripheral administration of a botulinum toxin to a patient experiencing a non-muscle disorder related pain, thereby improving patient function as determined by improvement in one or more of the factors of reduced pain, reduced time spent in bed, improved hearing, increased ambulation, healthier attitude and a more varied lifestyle.
22. A method for treating post-operative pain, the method comprising the step of peripheral administration of an effective amount of a botulinum toxin before, during or immediately after a surgical procedure, thereby alleviating a post-operative pain, wherein the surgical procedure is not carried out to treat a muscle spasm.
23. A method for treating a visceral pain the method comprising the step of non-

systemic, local administration of an effective amount of a botulinum toxin, thereby alleviating a visceral pain.

24. A method for treating pain, the method comprising the step of peripheral administration of a neurotoxin to a mammal, wherein the pain is not substantially due to a muscle spasm.

25. The method of claim 24, wherein, the neurotoxin is a botulinum toxin.

26. The method of claim 24, wherein the pain is not secondary to a muscle spasm.

27. The method of claim 24, wherein the peripheral administration is by subcutaneous administration of the neurotoxin.

First Hit

L5: Entry 4 of 14

File: PGPB

Mar 20, 2003

PGPUB-DOCUMENT-NUMBER: 20030054975  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20030054975 A1

TITLE: Methods for treating fibromyalgia

PUBLICATION-DATE: March 20, 2003

INVENTOR- INFORMATION:

| NAME            | CITY                | STATE | COUNTRY | RULE-47 |
|-----------------|---------------------|-------|---------|---------|
| Voet, Martin A. | San Juan Capistrano | CA    | US      |         |

US-CL-CURRENT: 514/2

CLAIMS:

What is claimed is:

1. A method for treating fibromyalgia, the method comprising the step of administering locally a therapeutically effective amount of a Clostridial neurotoxin to a peripheral location of a body of a patient afflicted with fibromyalgia, wherein the peripheral location is not a locus of pain, thereby treating fibromyalgia.
2. The method of claim 1 wherein the locus of pain and the peripheral location are located within a same dermatome.
3. The method of claim 1 wherein the peripheral location is in a head of the patient, and wherein the locus of pain is not in the head of the patient.
4. The method of claim 1 wherein the peripheral location is in a head of the patient, and wherein the locus of pain is at a fibromyalgia tender point.
5. The method of claim 1 wherein the peripheral location is in cranial area and/or a facial area of the patient, and wherein the locus of pain is at a fibromyalgia tender point.
6. The method of claim 1 wherein the neurotoxin is selected from the group consisting of botulinum neurotoxin types A, B, C, D, E, F, G, fragments thereof, derivatives thereof, mixtures thereof and combinations thereof.
7. The method of claim 1 wherein the neurotoxin is selected from the group consisting of botulinum neurotoxin types A, B, C, D, E, F and G.
8. The method of claim 1 wherein the Clostridial neurotoxin is a botulinum neurotoxin type A.
9. The method of claim 1 wherein the location of peripheral administration and the locus of pain have neuronal processes that are projected from the same spinal

sensory nerve root.

10. The method of claim 1 wherein the Clostridial neurotoxin is administered subcutaneously.

11. The method of claim 1 wherein the Clostridial neurotoxin is administered intramuscularly.

12. The method of claim 1 wherein the Clostridial neurotoxin is administered with a needle.

13. The method of claim 1 wherein the Clostridial neurotoxin is administered by needleless injection.

14. A method for treating pain, the method comprising the step of administering locally a therapeutically effective amount of a Clostridial neurotoxin to a peripheral location on a body of a patient, wherein the patient has a locus of pain, pain, and wherein the peripheral location is not at the locus of pain, thereby treating the pain.

15. The method of claim 14 wherein the locus of pain is at a fibromyalgia tender point.

16. The method of claim 15 wherein the patient has at least eleven loci of pain.

17. The method of claim 14 wherein the locus of pain and the peripheral location are located within a same dermatome.

18. The method of claim 14 wherein the neurotoxin is selected from the group consisting of botulinum neurotoxin types A, B, C, D, E, F, G, fragments thereof, derivatives thereof, mixtures thereof and combinations thereof.

19. The method of claim 14 wherein the neurotoxin is selected from the group consisting of botulinum neurotoxin types A, B, C, D, E, F and G.

20. The method of claim 14 wherein the Clostridial neurotoxin is a botulinum neurotoxin type A.

21. The method of claim 14 wherein the location of peripheral administration and the locus of pain have neuronal processes that are projected from the same spinal sensory nerve root.

22. The method of claim 14 wherein the Clostridial neurotoxin is administered subcutaneously.

23. The method of claim 14 wherein the Clostridial neurotoxin is administered intramuscularly.

24. The method of claim 14 wherein the Clostridial neurotoxin is administered with a needle.

25. The method of claim 14 wherein the Clostridial neurotoxin is administered by needleless injection.

26. A method for treating fibromyalgia, the method comprising the step of

administering locally a therapeutically effective amount of a Clostridial neurotoxin neurotoxin to a dermatome of a patient afflicted with fibromyalgia, wherein the dermatome substantially encompasses a locus of pain, and wherein the local administration is not at the locus of pain, thereby treating fibromyalgia.

27. The method of claim 26 wherein the neurotoxin is selected from the group consisting of botulinum neurotoxin types A, B, C, D, E, F, G, fragments thereof, derivatives thereof, mixtures thereof and combinations thereof.

28. The method of claim 26 wherein the neurotoxin is selected from the group consisting of botulinum neurotoxin types A, B, C, D, E, F and G.

29. The method of claim 26 wherein the Clostridial neurotoxin is a botulinum neurotoxin type A.

30. The method of claim 26 wherein the location of peripheral administration and the locus of pain have neuronal processes that are projected from the same spinal sensory nerve root.

31. The method of claim 26 wherein the Clostridial neurotoxin is administered subcutaneously.

32. The method of claim 26 wherein the Clostridial neurotoxin is administered intramuscularly.

33. The method of claim 26 wherein the Clostridial neurotoxin is administered with a needle.

34. The method of claim 26 wherein the Clostridial neurotoxin is administered by needleless injection.

35. A method for treating pain, the method comprising the step of administering locally a therapeutically effective amount of a Clostridial neurotoxin to a dermatome of a patient, wherein the patient has a locus of pain, wherein the dermatome substantially encompasses the locus of pain, and wherein the local administration is not to the locus of pain, thereby treating the pain.

36. The method of claim 35 wherein the locus of pain is at a fibromyalgia tender point.

37. The method of claim 36 wherein the patient has at least eleven loci of pain.

38. The method of claim 35 wherein the locus of pain and the peripheral location are located within a dermatome.

39. The method of claim 35 wherein the neurotoxin is selected from the group consisting of botulinum neurotoxin types A, B, C, D, E, F, G, fragments thereof, derivatives thereof, mixtures thereof and combinations thereof.

40. The method of claim 35 wherein the neurotoxin is selected from the group consisting of botulinum neurotoxin types A, B, C, D, E, F and G.

41. The method of claim 35 wherein the Clostridial neurotoxin is a botulinum neurotoxin type A.

42. The method of claim 35 wherein the location of peripheral administration and

the locus of pain have neuronal processes that are projected from the same spinal sensory nerve root.

43. The method of claim 35 wherein the Clostridial neurotoxin is administered subcutaneously.

44. The method of claim 35 wherein the Clostridial neurotoxin is administered intramuscularly.

45. The method of claim 35 wherein the Clostridial neurotoxin is administered with a needle.

46. The method of claim 35 wherein the Clostridial neurotoxin is administered by needleless injection.

47. A method for treating fibromyalgia, the method comprising the step of administering locally a therapeutically effective amount of a botulinum toxin type A to a dermatome of a patient afflicted with fibromyalgia, wherein the dermatome substantially encompasses a locus of pain which is at a fibromyalgia tender point, and wherein the local administration is not at the locus of pain, thereby treating fibromyalgia.

48. A method for treating pain, the method comprising the step of administering locally a therapeutically effective amount of a botulinum toxin type A to a dermatome of a patient, wherein the patient has a locus of pain which is at a fibromyalgia tender point, wherein the dermatome substantially encompasses the locus of pain, and wherein the local administration is not to the locus of pain, thereby treating the pain.

First Hit

L5: Entry 5 of 14

File: PGPB

Nov 28, 2002

PGPUB-DOCUMENT-NUMBER: 20020176872  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20020176872 A1

TITLE: Pain treatment by peripheral administration of a neurotoxin

PUBLICATION-DATE: November 28, 2002

INVENTOR-INFORMATION:

| NAME                | CITY          | STATE | COUNTRY | RULE-47 |
|---------------------|---------------|-------|---------|---------|
| Aoki, Kei Roger     | Coto de Caza  | CA    | US      |         |
| Cui, Minglei        | Irvine        | CA    | US      |         |
| Jenkins, Stephen W. | Mission Viejo | CA    | US      |         |

US-CL-CURRENT: 424/247.1

CLAIMS:

We claim:

1. A method for treating pain, the method comprising the step of peripheral administration of a neurotoxin to a mammal, wherein the pain treated is not associated with a muscle spasm.
2. The method of claim 1, wherein the neurotoxin comprises a neuronal binding moiety which is substantially native to the neurotoxin.
3. The method of claim 1, wherein the neurotoxin is a botulinum toxin.
4. The method of claim 1, wherein the neurotoxin is a botulinum toxin selected from the group consisting of botulinum toxin types A, B, C.sub.1, D, E, F and G.
5. The method of claim 1, wherein the neurotoxin is botulinum toxin type A.
6. The method of claim 1, wherein the neurotoxin is a modified neurotoxin having at least one amino acid deleted, modified or replaced.
7. The method of claim 1, wherein the neurotoxin is made at least in part by a recombinant process.
8. The method of claim 1, wherein the neurotoxin is administered in an amount between about 0.01 U/kg and about 35 U/kg.
9. The method of claim 1, wherein the pain is substantially alleviated for between about 1 month and about 6 months.
10. The method of claim 1, wherein the peripheral administration step is carried out prior to an onset of a nociceptive event or syndrome experienced by the mammal.

11. The method of claim 1, wherein the peripheral administration is carried out subsequent to an onset of a nociceptive event experienced by the mammal.
12. A method for alleviating pain, the method comprising the step of peripheral administration of a botulinum toxin to a human patient, thereby alleviating pain, wherein the pain is not associated with a muscle disorder.
13. The method of claim 12, wherein the neurotoxin is a botulinum toxin selected from the group consisting of botulinum toxin types A, B, C.sub.1, D, E, F and G.
14. A method for treating a pain, the method comprising the step of peripheral administration of a neurotoxin to a mammal, wherein the neurotoxin is a polypeptide comprising: a) a first amino acid sequence region comprising a wild type neuronal binding moiety, substantially completely derived from a neurotoxin selected from a group consisting botulinum toxin types A, B, C.sub.1, D, E, F, G and mixtures thereof; b) a second amino acid sequence region effective to translocate the polypeptide or a part thereof across an endosome membrane; and c) a third amino acid sequence region having therapeutic activity when released into a cytoplasm of a target cell, wherein the pain is not associated with a muscle spasm.
15. The method of claim 14, wherein the first amino acid sequence region of the polypeptide comprises a carboxyl terminal of a heavy chain derived from the neurotoxin.
16. The method of claim 14, wherein the neurotoxin is botulinum toxin type A.
17. The method of claim 14, wherein the second amino acid sequence region of the polypeptide comprises an amine terminal of a heavy chain derived from a neurotoxin selected from a group consisting of botulinum toxin types A, B, C.sub.1, D, E, F, G and mixtures thereof.
18. The method of claim 14, wherein the second amino acid sequence region of the polypeptide comprises an amine terminal of a toxin heavy chain derived from botulinum toxin type A.
19. The method of claim 14, wherein the third amino acid sequence region of the polypeptide comprises a toxin light chain derived from a neurotoxin selected from a group consisting of beratti toxin; butyricum toxin; tetani toxin; botulinum toxin types A, B, C.sub.1, D, E, F, G and mixtures thereof.
20. The method of claim 14, wherein the third amino acid sequence region of the polypeptide comprises a toxin light chain derived from botulinum toxin type A.
21. A method for improving patient function, the method comprising the step of peripheral administration of a botulinum toxin to a patient experiencing a non-muscle disorder related pain, thereby improving patient function as determined by improvement in one or more of the factors of reduced pain, reduced time spent in bed, improve hearing, increased ambulation, healthier attitude and a more varied lifestyle.
22. A method for treating post-operative pain, the method comprising the step of peripheral administration of an effective amount of a botulinum toxin before, during or immediately after a surgical procedure, thereby alleviating a post-operative pain, wherein the surgical procedure is not carried out to treat a muscle spasm.
23. A method for treating a visceral pain the method comprising the step of non-

systemic, local administration of an effective amount of a botulinum toxin, thereby alleviating a visceral pain.

24. A method for treating pain, the method comprising the step of peripheral administration of a neurotoxin to a mammal, wherein the pain is not substantially due to a muscle spasm.

25. The method of claim 24, wherein, the neurotoxin is a botulinum toxin.

26. The method of claim 24, wherein the pain is not secondary to a muscle spasm.

27. The method of claim 24, wherein the peripheral administration is by subcutaneous administration of the neurotoxin.